

FIGURE 1A

Nucleotide sequence of the partial PP2A-2 from *Physcomitrella patens* (SEQ ID NO:1)

GCACGAGGAGGACAAGTCTTCCGAACCCAGCTTAGAGTACTGGTTCAAGTGTGTAG
ACCTGGATTGTGACGGGATGATTATGCTACGAGGAGATGCAATATTTTTACGAGGAG
CAACTTCATCGGATGGAGTGCATGGCTCAGGAGCCTGTTCTTTTTGAGGATATCGTT
TGTCAAATGACAGATATGATCGGACCTGCTAATGAAGGACGGTTGACACTTCGGGA
CTTAAAGCGATGCAAATTATCTGGAACTTCTTCAATATCCTTTTTTAACCTCAACAA
ATTCGTAGCTTTTGAGACTCGTGATCCTTTCCTTATTCGTCAGGAGAGAGAGGACCC
GTCATTAAGTGGGATCGATTTGCACACATTGAGTACATCCGACTTTCAATGGA
AGAAGATGGCGAGGATGCCTCCAACGGCAGTGCTGAAGTCTGGGATGAGCCTGGTT
ACGAAGCCCCCTTTTAACCTTCTGTTGTCCCTCAAGATCCAGGCATTTGAATCATCAG
AGCAGAGACGGACGGCACGAAGAATTGCCTGCTGGACTTTTAAGAAAAGTGGTCTG
TGCAACCCTTTAAAGGTTGTCATTTATATCGTAAAGCATCTTGTTGAGTGAGCATCCT
GCCTAGGGGACCCTGTCTCTACTTTAACATC

FIGURE 1B

Nucleotide sequence of the partial PP2A-3 from *Physcomitrella patens* (SEQ ID NO:2)

CGGCACGAGGAAGCAGGTTAGAACCTCAATGTGGATCCCGGAGCTAGAGGAAATGG
GAGTTTGCTGACAAATAGTATGTTGCTTAATCCAAAGGGCTTGGCACCACGTCTATC
ATCAAACGGAGGACCTGTGACACGAGGCATGCCGTAATCAGCCAGGACTTTGTATTT
CCTCCTGGAGGCATTCCGTCACTTCATCTTCCCTCGGTAGTAGTTTGGAGTAACGAA
ACGACATTAGTTGCGAGATGTAGAAGAGTCTACGCAAACGCTCATGCATATCACATC
AACTCCATATCCAACAACAGCGATTGTGAGACATACATATCTGCAGATGATTTGAGA
ATAAATTTATGGAACCTTGAAGTTAGTGATCAGAGTTTCAACATTGTTGACATCAAA
CCAACAAACATGGAAGACCTTACAGAGGTGATAACGTCTGCAGAGTTCCATCCTACT
CATTGCAATGTGTTAGCATACAGTAGCAGCAAGGGCTCCATTCGACTCATTGATATG
CGTCAATCAGCCTTGTGTGATCGACACTCTAAAGCTGTTTGAGGAAGAAGTGGAGCC
CATCCTGGATCCAAGATCCTTTTTTTTACAGAAATCCATAGCTTCAATTTCTGACATT
AAGTTTGCAAGAGGCGATCGGTACATTCTCCAGTCGGGGGACTACATGGACTCTGAA
ACTGTGGGATGTGAACATGGAATCTGGTCCCTGTGGCACGTATTTAAAGTCCACGAG
CATTTGCGACCAAAGCTTCGTGATCTCTATGAGAACGATTCACCTCCGATAATTGAT
GTGTCCGGGG

FIGURE 1C

Nucleotide sequence of the partial PP2A-4 from *Physcomitrella patens* (SEQ ID NO:3)

GGCACGAGGAAGTATGGAAATGCGAATGTTTGGAAGTACTTCACGGATCTGTTCGA
CTACCTGCCTCTGACAGCTCTCATTGAGCACGAGATTTTTTGTCTTCATGGTGGTCTG
TCTCCATCGCTCGACACATTAGATCACATCCGAGCCCTAGATCGTATTCAAGAAGTG
CCGCACGAGGGCCCGATGTGTGATCTACTCTGGTCTGATCCAGATGATCGTTGTGGA
TGGGGTATTTCACCACGAGGTGCCGGTTATACTTTTGGTCAAGATATTGCAGAGCAG
TTCAATCATACCAATGGTCTAAGTTTGGTTGCACGTGCTCACCAGCTTGTGATGGAA
GGATAACAATTGGTGCCAGGATAAAAAATGTTGTCACAGTTTTTCAGTGCCCCCAATTAC
TGTTACCGCTGTGGGAACATGGCCGCCATAATGGGAGATAGATGAAAC

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FIGURE 1D

Nucleotide sequence of the partial PP2C-1 from *Physcomitrella patens* (SEQ ID NO:4)

GCACCAGGTTACTGTGGGGCCTCGTCCCCCGGAAGAGCATGTTAGCTGGGGTTAGA
GAGCTAGGGCAGTGAGTGCCGATCATTTTTGCGTCACGCGTATCGATTTGCAAGGGC
GAAGTGCACAAGAGGGATGGGAATTTATCTTTGCTCTCCAAAGACTGACAAGACAT
CCGAAGATGATGAGAATGCCGAGTTACGCTATGGTTTATCAGCCATGCAAGGGTGG
CGCGATAGCATGGAGGATGCACACAAAGCTATCTTAAACGTTGATAAGAACACGTC
AACATCAATATTTGGCATCTTTGATGGTCACGGAGGTAAATTGGTGGCAAAATTTTG
TGCAAAGCACTTACACCAAGAGGTTCTGAAGTCTGAAGCGTACGCTAAAGGTGACT
TAAAAGCAAGTTTGGGAATATTCCTTTTTACGGATGGATGAGATGATGAAGGGAGCA
AGTGGGTGGAAAGAGCTTCAAAGTTTGGAGGAAACAAGTAGTCAGCTTGATAAACT
CGGTAATGGAAATAGCTCCTCTAATGCGAGGGAGGATGACGAAAGTGATTATTCCT
ATGCTGTGCTAACTGAAAGCAATGATAGT

FIGURE 1E

Nucleotide sequence of the partial PP2C-2 from *Physcomitrella patens* (SEQ ID NO:5)

CGGCACACNGTTTGTACCGCCATTTACAGAAATTGCCACCCAACATGGGGGAATGTC
TAGTGAGGTTCTTCAGTCAAGCCTTTAAGCAGACCGAGGAGGGGTTTTTGGAAATCG
TAAGGGATTCATGGCTCACGAAGCCCCAGATTGCTGCCGTTGGTTCCTGTTGCCTGG
TAGGTGTGGTGTGGGAGTGTAAGCTGTACATCGCCAGCCTGGGTGATTCTAAGGCTG
TGCTCGGTAGATTCTCTCGCAATTTGCAATCAGTAATTGCGACGGAGATATCCTNCT
GAGCATAACGCCAGTGTTGAGGCTGTTAGGCAGGACCTGCAAGCTGCGCATCCTGA
TGACCCGCGCATTGTTGTGCTGAGGCACGGAGTGTGGCGTGTGAAGGGTTTGATTCA
AGTCTCTCGATCCATTGGCGACGTTTATCTGAAGAAGGCTGAGTTCAACCGTGAGCC
TCTAATCGGCCGGTTCCGCCTGCCAGAGCCGCTCCAGAGACCCGTCATGAGCGCCGA
GCCGGACATCCGAGTAATCGATCTGACCCCAGATGTGGAGTTGTGATTTTGCATCAG
ATGGGTTGTGGGAGCACT

FIGURE 2A

Nucleotide sequence of the full-length PP2A-2 from *Physcomitrella patens* (SEQ ID NO:6)

ATCCCGGGCATCGGGAAAGACGGTGTGTGTGTGTGTGTGTGTTTGCTTGCTTGCATG
CATTGTGGGGGGTACCCAGATCATGCTTCAGGGAGGTTTGGAGTGCGCCCAATGGA
GCCCTTGACGTTGGCCGTGGCAGATCTGGACCCCGATCTGCTTCAACTCCCTGCGGA
TTTCACCCCCTTTGCTTCTCCTTCATCGTCATCGCCTGCTTCTGTGGGAGTTAGCAAC
AAGCTTGGAGGTGTTTGTAGGTTGCACTTGGAGGAGCTTTACGCGCAATGGATTTCG
CTGCCCCGACACGCAGCGTCTGGTTACGAATTTGTTGGAAGAAGCAAAAGGAGGAGC
TGGACACCCAAATGTTGGCCTATCACTTTTGCCAGGTCATCTATCTGGAGCCGCAGG
AAGCACTCCCCCGTTGCCTCCTCGGAGCTCTGGTTCACCAATGTCTCCCAGGTCGCC
TTTCAGCAGACGTATGGGAAGTAGCCACCTCATGCGGGACTCTCCGTTGAAGAAAA
GTAGCGAACCTGTGCGAGAGATCATACCCCAGTTCTATTTTCCGAATGGGCCCCCGC
CATCGAAGGATAACCATGAGTCGTGCATGGCTCGCGTAAACCAAATATTCGGAGCTC
ATCCAGAAGGTTTACCTGCATCAGCATTTGCAACCATTACTAAGGATGTATGCAAAC
TACCGTCCTTCTTCTCCATGGCTTTATTCAAAAAGATTGACATCAATAATACAGGCTT
GGTTACAAGGGACAAGTTCGTAGAATACTGGGTGGACCAAACATGCTGGCCATGG
AACTGCAACTCGCGTCTTCACTGTGTTGAAGCAACCCGACAAGAATTTTCTGAGAC
AGGAAGATTTTAGGCCCGTTTTACGAGAATTGTTGTTGACGCATCGCGGTTTGGAAT
TTCTCCATGACACCCCGGAGTTTCAAGACAGATATGCTGAAACTGTAATATACAGAA
TATTCTACCATGTAAATAGAGCTGGGAATGGTCGGCTACAACTTAGAGAGTTAAAGC
GGAGTAATTTAATTGCTGCTCTTCAGCAAGTGGATGAAGAGGAAGACATCAACAAA
GTGTTACGTTACTTCTCATATGAACATTTTTATGTCATATATTGCAAGTTCTGGGAGC
TGGATTCAGATCACGATTTTTTAATAGACAAAGATGATCTCCTTCGATATGGAAATC

FIGURE 2A

Nucleotide sequence of the full-length PP2A-2 from *Physcomitrella patens* (SEQ ID NO:6)

Continued

ATGCTCTCACCTACCGAATCGTAGAGCGTATCTTTTCCCAGGTTCCAAGAAAGTTCA
CCAGCAAAGTAGCTGGAAAGATGGGTTATGAAGACTTCGTATGGTTTATTCTTTCAG
AAGAGGACAAGTCTTCCGAACCCAGCTTAGAGTACTGGTTCAAGTGTGTAGACCTG
GATTGTGACGGGATGATTATACTAAATGAGATGCAATATTTTTACGAGGAGCAACTT
CATCGGATGGAGTGCATGGCTCAGGAGCCTGTTCTTTTTGAGGATATCGTTTGTCAA
ATGACAGATATGATCGGACCTGCTAATGAAGGACGGTTGACACTTCGGGACTTAAA
GCGATGCAAATTATCTGGAAACTTCTTCAATATCCTTTTTTAACCTCAACAAATTCGTA
GCTTTTGAGACTCGTGATCCTTTCCTTATTCGTCAGGAGAGAGAGGACCCGTCATTA
ACTGAGTGGGATCGATTTGCACACATTGAGTACATCCGACTTTCATGGAAGAAGAT
GGCGAGGATGCCTCCAACGGCAGTGCTGAAGTCTGGGATGAGCCTGGTTACGAAGC
CCCCTTTTAACCTTCTGTTGTCCCTCAAGATCCAGGCATTTGAATCATCAGAGCAGA
GACGGACGGCACGAAGAATTGCCTGCTGGACTTTTAAGAAAACCTGGTCTGTGCAAC
CCTTTAAAGGTTGTCCATTTATATCGTAAAGCATCTTGTTTGAGTGAGCATCCTGCCT
AGGGGGACCCTGTCTCTACTTTAAAATCAGACAATGCATGTGACATTTGTACAGTTC
ACAAATGGCAGCATTTATCTATTTAGGAAGTCCTTCAACATTATATCTTTCAGGTCTC
CAGCTCGCCATTTACGGGTGCTACTGTAACCTCGAGTCCTTGTGCAAGAATCATGAAG
AATACTGAGCATGGCGACGTCCAAAACCTTCGAGACAACGTCAAAGAACTACTTGAC
CGGTCTCTCAACAAGTTCTGTTACTTAAGTGCACAGCACTGGGGTAGCCCTCTTGCTT
TCAAAATCACTGTGTGTGACACTGTAGCTACTACTTCAGGGAAATTGATGTTGGGCA
TTCTAGGCCTTCTGAGCTTTTTTTTGCAGGTCTTTTTTGATGGTCTCCGTCACGTTATTTG

FIGURE 2A

Nucleotide sequence of the full-length PP2A-2 from *Physcomitrella patens* (SEQ ID NO:6)

Continued

TTTAGGAATGAAGCAGCCTGCCCAGGATAGTGATGTAGACATGGTCCCGTTTCTGAT
CTTCTCAATCAGGCTTAACCATGCAGTAATTAAGCAGGTAGGCACAGTGTGCTCAAC
ACGTAATCCCCTTCCCACACTAGTCTTCTCTGTAGACTCTTTATTTTCAGCTTTTGATCC
GGAACTTAAAGCTTTTGACTGGTTCAGCCCGAGGCTGGTAGCGTTAACGC

FIGURE 2B

Nucleotide sequence of the full-length PP2A-3 from *Physcomitrella patens* (SEQ ID NO:7)

ATCCCGGGTGGTGGTGGCGGTGAAGTTATTACCCGAGAGCTTCGACAGCTTCACGCA
TGTTTGCGATTGCACGCAAGGACGCAACTGGCTCCGTAGTTGTAATGAATGGATTCA
CCGCGATGCAAGCTTCTCAACGAGCCGTTGGAAGCTTCGTGTGGTGGAGTGTGGAA
ACTGCCGGAGCTCCGTAACCATGCGGGGTTCATGGAAGTGGTGGCTGCCAATTCGG
AGGCGGATTTCAATGTGGTAGAGTTTGGACTTAGAGTTTTGTAGGAGGAGGGGTTGA
AGTGTGGGCCAAGTGTTGGGGCTCCTGAAACAGGGGAAAAGAAAAAGAGACGACG
ACGCCGGAGATTGGAGATTGAGGTGTGTGTGTGTGTGTTTGTGGTTAGTTTAGCGGT
TTGAAGTGATGATCAGTGGTGCAAGCGGGGCACCCGCTGGGGCCCCAGTTCCCCT
GCTACTGGTTCTGTTGCTGCGCCATTGCCCCGCGTTGGAGTGGAAATTCTCGCAGGTTT
TCGGCGAGCGTGCCATCGGAGAGGAAGTGCAAGAAGTTGATATTATCTCGGCTATT
GAGTTTGATAAGACTGGAGAACATTTGGCGACTGGCGACAGAGGAGGACGCGTTGT
ACTTTTGTAGAGAACAGATGGCAAAGATCAAAGGACACGGAGAGAGTTGGAAAGA
GCTGATTCTGCGGGGTCCAGGCATCCTGAATATCGATACTCTACCGAGTTTCAAAGT
CATGAACCAGAGTTTGATTACTTGAAGAGTTTGGAAATAGAGGAGAAGATCAATAA
AATTAGATGGTGTCAGACTGCCAACGCCGCTCAGTTCTTAATTTCTACGAATGACAA
AACCATTAAATTATGGAAGGTGACTGAAAAGAAAGTGAAGCAAGTCAAGAACCTGA
ATGTGGATCCTGGAGCCAGAGGGAATGGAAACCCATTGTCGAATAACATGATGCTC
AATCCAAAGGGTTTTGCACCACGGTTGTCGATGAATGGAGTTGCCGCGAACCGATCT
ACGCCTGCCATCAGCCCTGACTTTGTATTTCCCTCCTGGAGGCATTCCGTCTCTTCATC
TTCCCTCGGTATGGAGTAACGAGACGGCATTAGTTGCGAGATGTAGAAGAGCCTAC
GCAAACGCTCATGCATATCATATCAACTCCATATCTAACAACAGCGATTGTGAGACA

FIGURE 2B

Nucleotide sequence of the full-length PP2A-3 from *Physcomitrella patens* (SEQ ID NO:7)

Continued

TACATCTCTGCAGATGATTTGAGAATAAATTTATGGAATCTTGAAGTTAGTGATCAG
AGTTTCAATATTGTTGACATCAAACCAACAAACATGGAAGACCTTACAGAGGTGAT
AACGTCTGCAGAGTTCCATCCTTCTCATTGCAATGTGTTAGCATAACAGTAGCAGCAA
GGGCTCTATTCGACTCATTGATATGCGTCAATCAGCCTTGTGTGATCGACATTCAAA
GCTGTTTGAGGAGACTGAGCATGCTGGATCAAGATCCTTTTTTACAGAAATCATAGC
TTCTATTTCTGATATTAAGTTTGCGAGAGGCGGTTCGGTACATTCTGAGTCGGGACTA
CATGACTCTGAAATTGTGGGATGTGAACATGGAATCTTCCCCTGTGGCCGTATTTAA
AGTCCACGAGTATTTGCGTCCAAAGCTTTGTGATCTCTATGAGAACGACTCCATCTT
CGACAAGTTTGAATGTTGTCTTAGTGGGGATGGCATGCGTGTGGCAACTGGTTCCTA
CAGCAACTTGTTCCGGGTGTTTGGGGCCGCTACCGGAAGTGAGGAAGCGTCAACCTT
GGAAGCTAGCAAGACTCCAAACAGGCGTATCGTGACACCTCCCTCAAAGCTGGAA
GTCGACTAGCCAATCTTGCTCGTGGTCGGCGTGATAACCGTCGAGGTGGAGAAAGC
CCAGGTATAGATTTGAATGGGGGAGTGCAAGATTTACATCAAAGCTTTTGCACTTA
GCATGGCATCCAGCAGCGAATGTGATCGCTTTCGCGCTAGCGCGTTGCTCGCTGCAT
CCAACAGCTTGTACATGTTAACGC

FIGURE 2C

Nucleotide sequence of the full-length PP2A-4 variant from *Physcomitrella patens*

(SEQ ID NO:8)

GGCGTTAACGCGCGGAGGAGAGCGGATCGGTTAGGGTTTGGTGCCAGGGGGGAGGG
CAGAGGTTGGGACAATGCCGTCATATGCAGATGTAGACCGGCAGATAGAGCAGCTG
TCGGAGTGCAAGCCGTTGTCGGAGTTGGAGGTGAAGAACCTATGTGATCAAGCTCG
GACGATCTTGGTGGAGGAGTGGAACGTGCAGCCCGTGAAGTGTCTGTACGGTTTG
CGGTGACATCCATGGCCAGTTTCATGATCTCATCGAGCTTTTCCGCATAGGAGGCAA
GGCGCCCGACACGAACACTTGTTCATGGGCGACTATGTGGATCGTGGATATTATTC
TGTCGAGACTGTGTCGCTCTTAGTGGCCCTGAAGGTGCGGTATAGGGATAGGATCAC
AATCTTGCGAGGGAACCACGAGAGCAGGCAGATTACGCAAGTATATGGTTTCTATG
ATGAATGCCTGCGGAAGTATGGAAATGCGAATGTTTGGAAGTACTTCACGGATCTGT
TCGACTACCTGCCTCTGACAGCTCTCATTGAGCACGAGATTTTTTGTCTTCATGGTGG
TCTGTCTCCATCGCTCGACACATTAGATCACATCCGAGCCCTAGATCGTATTCAAGA
AGTGCCGCACGAGGGCCCGATGTGTGATCTACTCTGGTCTGATCCAGATGATCGTTG
TGGATGGGGCATTTCACCACGAGGTGCCGGTTATACTTTTGGTCAAGATATTGCAGA
GCAGTTCAATCATACCAATGGTCTAAGTTTGGTTGCACGTGCTCACCAGCTTGTGAT
GGAAGGATACAATTGGTGCCAGGATAAAAATGTTGTACAGTTTTTCAGTGCCCCCAA
TTACTGTTACCGCTGTGGGAACATGGCCGCCATAATGGAGATAGATGAAACAATGA
ATCGGTCTTTTCTTCAGTTCGAACCAGCACCGCGGCAAAGTGAACCAGATGTGACGC
GGAAGACTCCTGATTACTTTCTGTAAACATGGCCTATACATGGTACCTTTTACTTACT
GAATTGTTCTGTATAGTCACCTTCCATGGAAGCAGTTTGCCCCTGAATGAAGATACT
CCCTCATGATCTAGTAGTATGAAGTTATCTTCTTTGAAGTGTTTGTCCCTTTTTTAGT

FIGURE 2C

Nucleotide sequence of the full-length PP2A-4 variant from *Physcomitrella patens*

(SEQ ID NO:8)

Continued

ACTTGCTCCTCTGTTCATTCATAAAGTTGCCTTCAGAACAACCTGAGATGTTGTGAATG
TAACTGCGACAAGAGGAGCAGTGTCAATGGTTGCAAGGGTTATAGTGATTAGGGAA
AGAAGGTAGCACATGTTACTTCAAATCGATCAGAGACTTCTATGGAAAAGATGACG
ATGGTGGAAACAACGTTTCATCTCCACACCTACTGTATATGGCATGCTCGAGCTCGC

FIGURE 2D

Nucleotide sequence of the full-length PP2C-1 from *Physcomitrella patens* (SEQ ID NO:9)

GCGATATCGATTTGCAAGGGCGAAGTGCACAAGAGGGATGGGAATTTATCTTTGCTC
TCCAAAGACTGACAAGACATCCGAAGATGATGAGAATGCCGAGTTACGCTATGGTT
TATCAGCCATGCAAGGGTGGCGCGATAGCATGGAGGATGCACACAAAGCTATCTTA
AACGTTGATAAGAACACGTCAACATCAATATTTGGCATCTTTGATGGTCACGGAGGT
AAATTGGTGGCAAAATTTTGTGCAAAGCACTTACACCAAGAGGTTCTGAAGTCTGAA
GCGTACGCTAAAGGTGACTTAAAAGCAAGTTTGGGAATATTCCTTTTTACGGATGGAT
GAGATGATGAAGGGAGCAAGTGGGTGGAAAGAGCTTCAAAGTTTGGAGGAAACAA
GTAGTCAGCTTGATAAACTCGGTAATGGAAATAGCTCCTCTAATGCGAGGGAGGAT
GACGAAAGTGATTATTCCTATGCTGTGCTAACTGAAAGCAATGATAGTAACTTGGCC
ACTAAAAAGCATAAATATTCAGATTTCCAGGGTCCCATTATGGGAGTACTGCAGTG
GTGGCTCTGATTCGTGGCAATAAACTGTTCGTCGCAAACGCTGGAGACTCTCGCTGC
ATAATGTCTCGACGTGGCGAGGCTGTAAATCTCTCGATTGATCACAAACCCAACCTA
GAGCATGAGAGGAAAAGGATAGAGAGTGCTGGAGGCTTCGTCCATGGTGGTCGTGT
TAACGGTAGTCTAAATCTTACAAGAGCAATAGGGGACATGGAATTCAAGGGTCGAC
CTGATTTGCCACCTGACAAGCAAGTAGTGACGTGCTGTCCCGATGTTGTCGAAGTTG
ACCTTGGACCCGGGGATGAATTTATCGTGCTGGCCTGTGATGGAATATGGGATGTTA
TGTCTAGTCAAGCTGTCGTGGACTTCGTAAATCAAGATTACCTACCACCAAACTC
TATCATCTTTGTGTGAGGAGATACTGGATTACTGCTTGTCCCAACCACCCGCCAGC
AAGAAGGATGTGATAACATGAGCATCATTATAGTCCAACCAAGCAATCGGGAGTT
GCAGCATCTTCTTCCACAGATTGACGTTGATGACCTTCGTTCGGACGCTGGAGCTCAA
AACTCATTGTGGACTTCAACTTCTGAGTTCAAAGTTCCTTGTAGACTTCTTGTCATGT

FIGURE 2D

Nucleotide sequence of the full-length PP2C-1 from *Physcomitrella patens* (SEQ ID NO:9)

Continued

CCAACTTCTACCTAATTTCTGAATTTCAAAAGACTTAAATATAAACCTAGATATAGGC
TGATCATAAAATTTCTGGGTCAAAGGCGTTATGGTCTTCTATTCAAATATAAGGTGAA
TTAATGCTAAAACTGGGAGTTGCCTTCTGCCTTCGATATCGC

FIGURE 2E

Nucleotide sequence of the full-length PP2C-2 from *Physcomitrella patens* (SEQ ID NO:10)

ATCCCGGGCGTGGAAGGAGAGGGAATGTGGAGGAAAGAGTGGAGTTATTATTTGTC
AGTCGAATGTACAGGAAGAAGCGAAAAGGATATGGAGTGGAAATATGAAGAAGCT
GGTTGAAGAAGGACGTCTGAGAGATGGTAGAGTGGGTAATGAAGATGTTGATGGCA
TGTTGGCGTCCGGTGCAAAAATACACGCACCTGGGGGAGGAGAATGGAGATAACCA
CGACCCACTGCTGTGGCACAAAGATTTGGGTGATCATGCCGCAGGACAGTTTTCTAT
TGCCGCAGTTCAGGCGAATGCTATCTTGGAGGACATGGTCCAAGTGGAAACTGGAC
CGTTTGGTACCTTTGTTGGGGTGTACGATGGCCATGGTGGCCCGGAAGCTTCTCGTT
ACGTCAATGACAGTTTGTACCGCCATTTACAGAAATTTGCCACCCAACATGGGGGAA
TGTCTAGTGAGGTTCTTCAGCAAGCCTTTAAGCAGACCGAGGAGGGGTTTTTGGAAA
TCGTAAGGGATTCATGGCTCACGAAGCCCCAGATTGCTGCCGTTGGTTCCTGTTGCC
TGGTAGGTGTGGTGTGGGAGTGTAAGCTGTACATCGCCAGCCTGGGTGATTCTAAGG
CTGTGCTCGGTAGATTCTCTCGCAATTTGCAATCAGTAATTGCGACGGAGATATCCA
CTGAGCATAACGCCAGTGTTGAGGCTGTTAGGCAGGACCTGCAAGCTGCGCATCCTG
ATGACCCGCGCATTGTTGTGCTGAGGCACGGAGTGTGGCGTGTGAAGGGTTTGATTC
AAGTCTCTCGATCCATTGGCGACGTTTATCTGAAGAAGGCTGAGTTCAACCGTGAGC
CTCTAATCGGCCGGTTCCGCCTGCCAGAGCCGCTCCAGAGACCCGTCATGAGCGCCG
AGCCGGACATCCGAGTAATCGATCTGACCCCAGATGTGGAGTTTGTGATTTTTTGCAT
CAGATGGGTTGTGGGAGCACTTGTCCAACCAAGAGGCTGTGGATATTGTTCACAAAT
ACCCGCGCGCTGGCATCGCCAGGCAGCTCATTCGATACGCTCTTCATGAAGCGGCCA
AGAAGCGAGAGATGCGGTACTCGGATCTGAAGAAGATCGAGCGTGGTATCCGGAGA
CACTTTCATGACGACATCACAGTGGTAGTCGTCTTCTTAGATCATAATTTGGTTAGCA

FIGURE 2E

Nucleotide sequence of the full-length PP2C-2 from *Physcomitrella patens* (SEQ ID NO:10)

Continued

ATGGTAGTGGTATCTCGCATCACATTTCTGTGAAAGGTGGAGTTGACAAACCTTCTT
GAAAAGGGGTCGTAGGTACTCTCCATGGTATCTTGCAGGTTTTGTGCACATGAAACTT
CCCCCTTTCGCACGATGGGGTAGAAGTGATTGCTCCTTTGAAGCTACACCTCCCTGC
AACCCAATCGTCTGTCGAACCTGAAGCTAGACACCCACAGGAGCTTGC

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FIGURE 3A

Deduced amino acid sequence of PP2A-2 from *Physcomitrella patens* (SEQ ID NO:11)

MHCGGYPDHASGRFGVRPMEPLTLAVADLDPDLLQLPADFTPFASPSSSSPASVGVSNK
LGGVCRLHLEELYAQWISLPDTQRLVTNLLEEAKGGAGHPNVGLSLLPGHLSGAAGSTP
PLPPRSSGSPMSPRSPFSRRMGTSHLMRDSPLKKSSEPVREIIPQFYFPNGPPPSKDTIESC
MARVNQIFGAHPEGLPASAFATITKDVCKLPSFFSMALFKKIDINNTGLVTRDKFVEYW
VDQNMLAMDTATRVFTVLKQPDKNFLRQEDFRPVLRELLTHRGLEFLHDTPEFQDRY
AETVIYRIFYHVNRAAGNGRLQLRELKRSNLIAALQQVDEEEDINKVLRYFSYEHFYVIYC
KFWELSDHDFLIDKDDLRYGNHALTYRIVERIFSQVPRKFTSKVAGKMGYEDFVWFI
LSEEDKSSEPSLEYWFKCVDLDCDGMILNEMQYFYEEQLHRMECMAQEPVLFEIVCQ
MTDMIGPANEGRLTLRDLKRCKLSGNFFNILFNLNKFVAFETRDPFLIRQEREDPSLTEW
DRFAHIEYIRLSMEEDGEDASNGSAEVWDEPGYEAPF*

FIGURE 3B

Deduced amino acid sequence of PP2A-3 from *Physcomitrella patens* (SEQ ID NO:12)

MISGASGAPAGAPVPTATGSVAAPLPALWKFSQVFGERAIGEEVQEVDIISAIEFDKTGE
HLATGDRGGRVVLFFERTDGKDQRTRELERADSAGSRHPEYRYSTEFQSHEPEFDYLKS
LEIEEKINKIRWCQTANAAQFLISTNDKTIKLWKVTEKKVKQVKNLNVDPGARGNGNPL
SNNMMLNPKGFAPRLSMNGVAANRSTPAISPDFVFPPGGIPSLHLPSVWSNETALVARC
RRAYANAHAYHINSISNNSDCETYISADDLRINLWNLEVSDQSFNIVDIKPTNMEDLTEVI
TSAEFHPSHCNVLAYSSSKGSIRLIDMRQSALCDRHSKLFEE TEHAGSR SFFTEIIASISDIK
FARGGRYILSRDYMTLKLWDVNMESSPVA VFKVHEYLRPKLCDLYENDSIFDKFECCLS
GDGMRVATGSYSNLF RVFGAATGSEEASTLEASKTPNRRIVTPPSKAGSRLANLARGRR
DNRRGGESPGIDLNGGVQDFTSKLLHLAWHPAANVIAFALARCSLHPTACTC*

FIGURE 3C

Deduced amino acid sequence of PP2A-4 from *Physcomitrella patens* (SEQ ID NO:13)

MPSYADVDRQIEQLSECKPLSELEVKNLCDQARTILVEEWNVQPVKCPVTVCGDIHGQF
HDLIELFRIGGKAPDTNYLFMGDYVDRGYYSVETVSLLVALKVRYRDRITILRGNHESR
QITQVYGFYDECLRKYGNANVWKYFTDLFDYLPLTALIEHEIFCLHGGLSPSLDTLDHIR
ALDRIQEVPHGPMCDLLWSDPDDRC^{*}GWGISPRGAGYTFGQDIAEQFNHTNGLSLVAR
AHQLVMEGYNWCQDKNVVTVFSAPNYCYRCGNMAAIMEIDETMNRSLQFEPAPRQS
EPDVTRKTPDYFL*

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FIGURE 3D

Deduced amino acid sequence of PP2C-1 from *Physcomitrella patens* (SEQ ID NO:14)

MGIYLCSPKTDKTSEDDENAE LRYGLSAMQGW RDSMEDAHKAILNV DKNTSTSIFGIFD
GHGGKLVAKFCAKHLHQEVLKSEAYAKGDLKASLEYSFLRMDEMMKGASGWKELQSL
EETSSQLDKLGNGNSSSNAREDDSDYSYAVL TESNDSNLATKKHKYSDFQGPIYGSTAV
VALIRGNKLFVANAGDSRCIMSRRGEAVNLSIDHKPNLEHERKRIESAGGFVHGGRVNGS
LNLTRAIGDMEFKGRPDLPPDKQVV TCCPDVVEVDLGP GDEFIVLACDGIWDVMSSQAV
VDFVKSRLPTTKTLSSLCEEILDYCLSP TTRQQEGCDNMSIIIVQPKQSGVAASSSTD*

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FIGURE 3E

Deduced amino acid sequence of PP2C-2 from *Physcomitrella patens* (SEQ ID NO:15)

MVEWVMKMLMACWRPVQKYTHLGEENGDNHDPLLWHKDLGDHAAGQFSIAAVQAN
AILEDMVQVETGPFGTFGVYDGHGGPEASRYVNDSLRYHLQKFATQHGGMSSEVLQ
QAFKQTEEGFLEIVRDSWLTKPQIAAVGSCCLVGVVWECKLYIASLGDSKAVLGRFSRN
LQSVIATEISTEHNASVEAVRQDLQAAHPDDPRIVVLRHGVWRVKGLIQVSRSIGDVYL
KKAEFNREPLIGRFRLPEPLQRPVMSAEPDIRVIDLTPDVEFVIFASDGLWEHLSNQEAVD
IVHKYPRAGIARQLIRYALHEAAKKREMRYSDLKKIERGIRRHFFHDDITVVVVFLDHNL
VSNGSGISHHISVKGGVDKPS*

Figure 4: Schematic diagram of the genetic construct. The construct consists of the LB OCS3 promoter, the NPTII gene, the AtAct2-i gene, the Super promoter, the "Gene of Interest", the NOSpA promoter, and the RB gene.

FIGURE 4

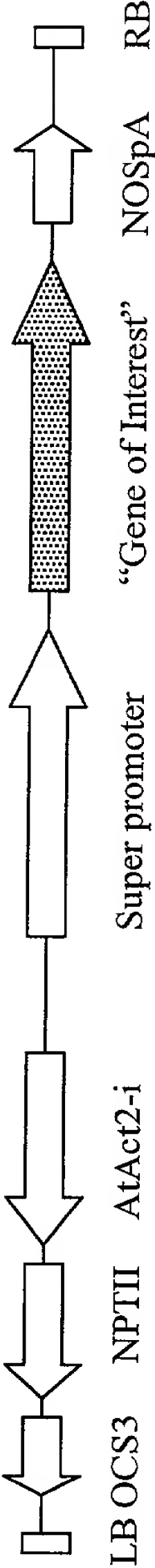
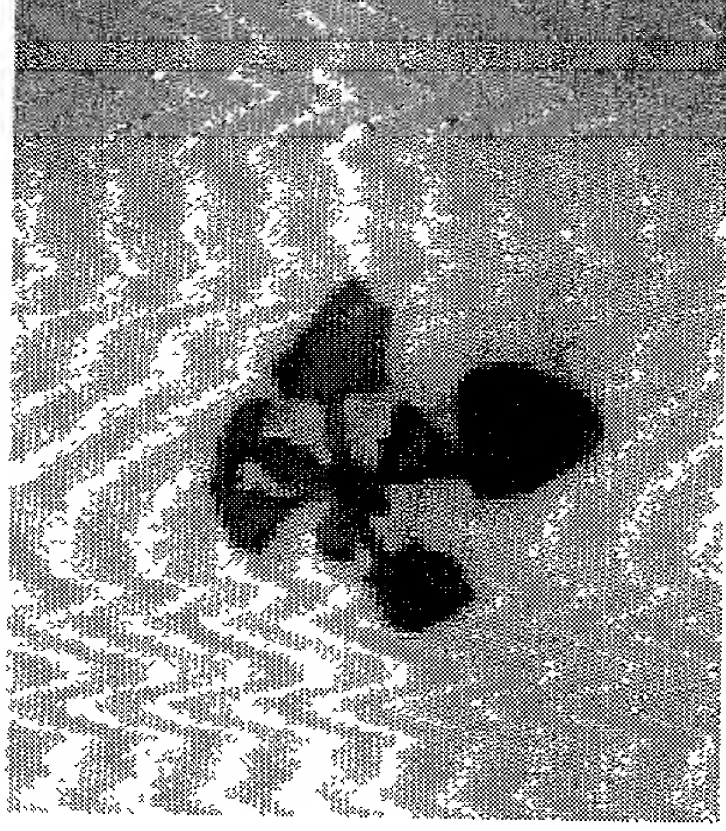
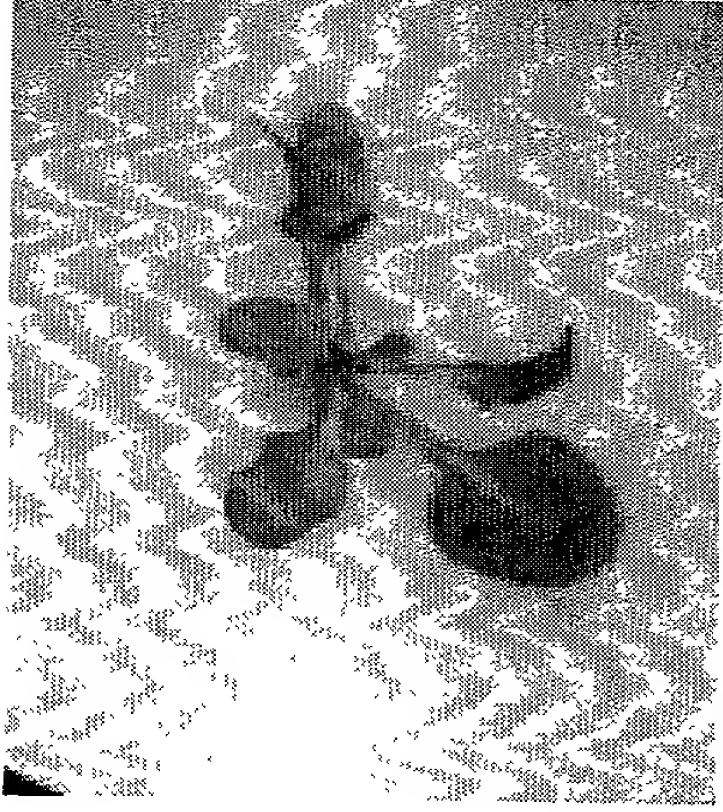
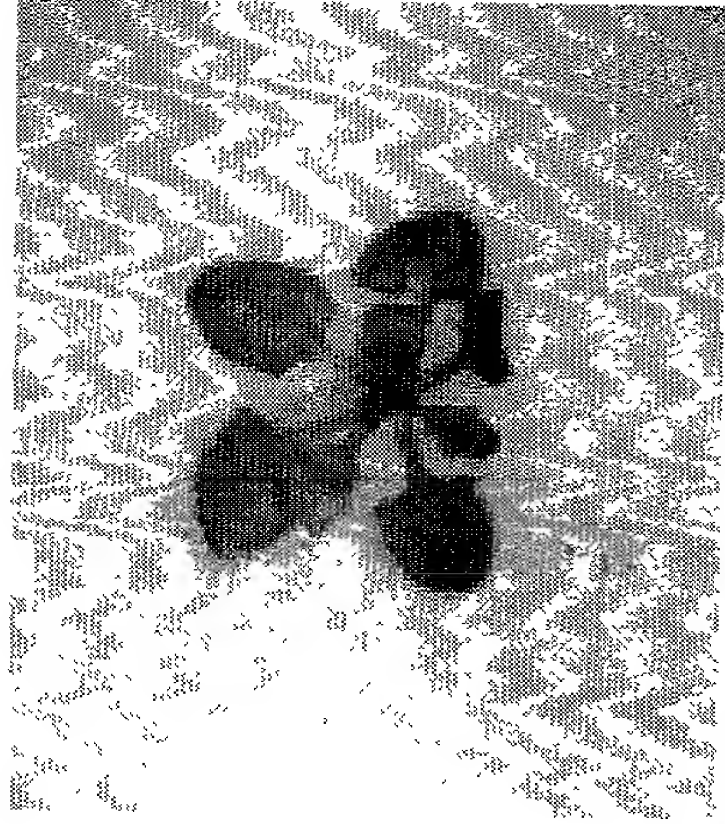
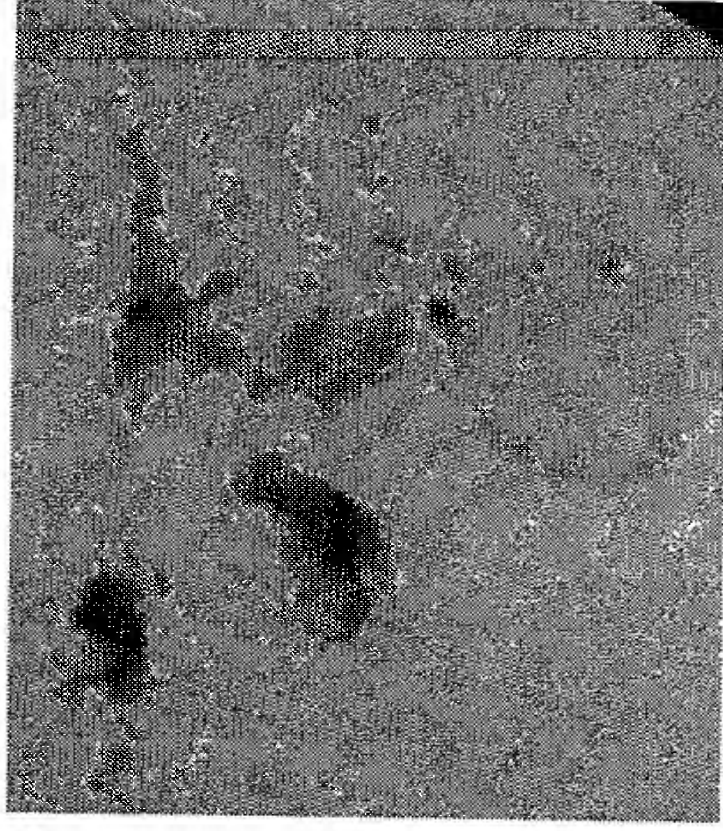
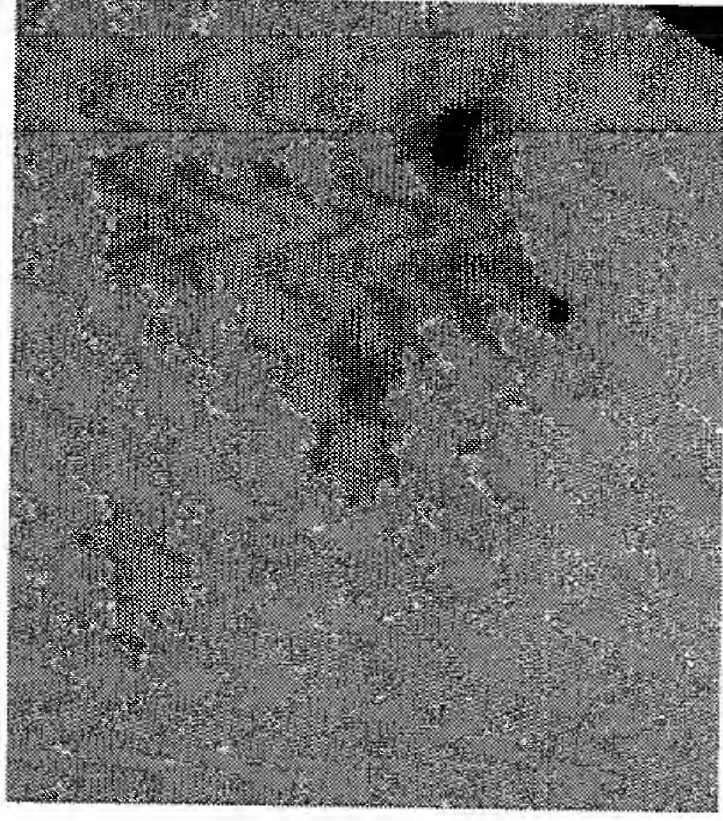
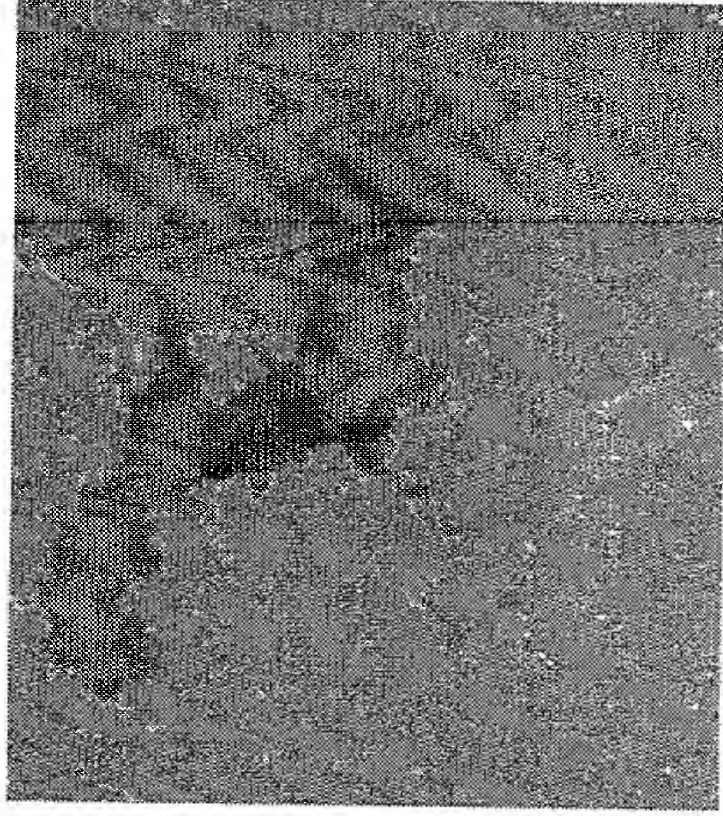


Figure 5

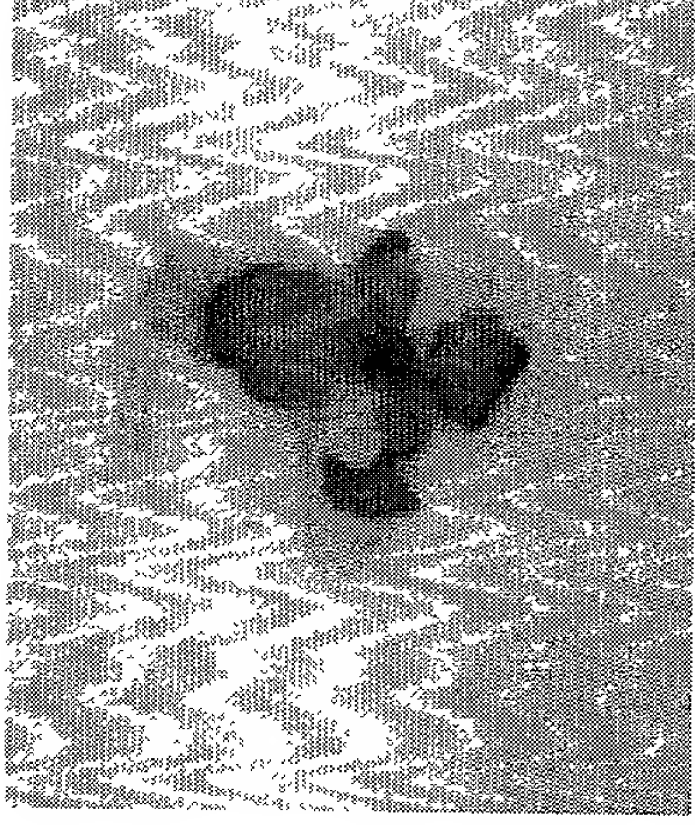
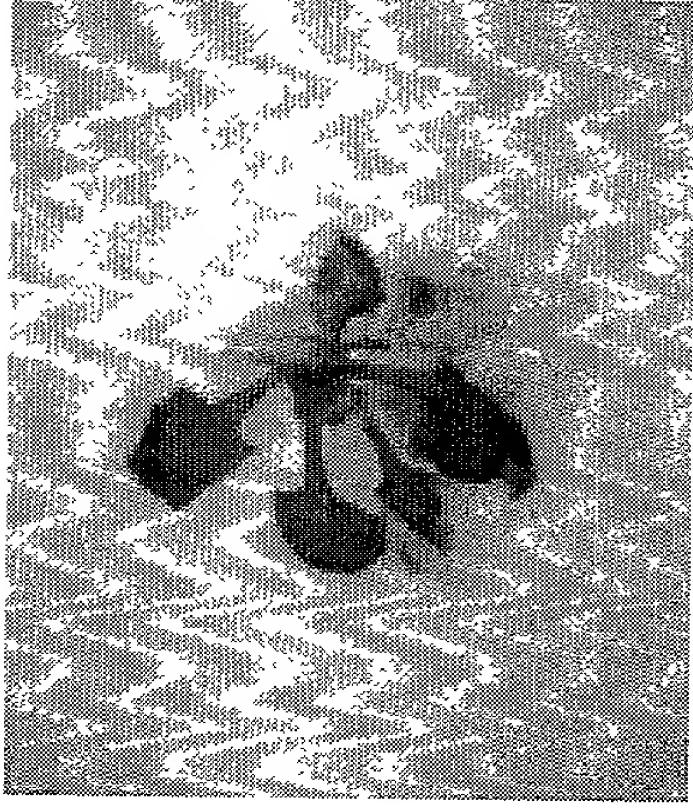
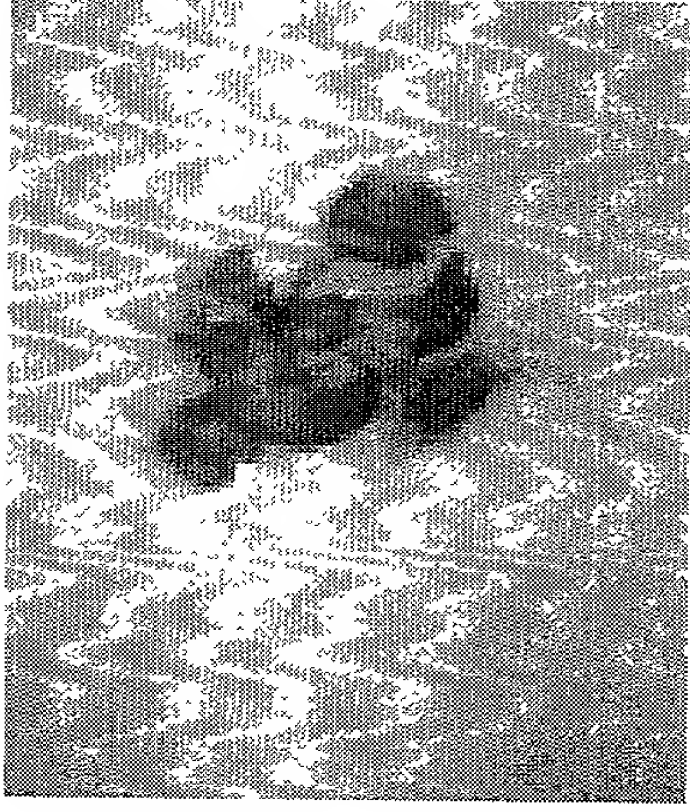


PpPP2A-2

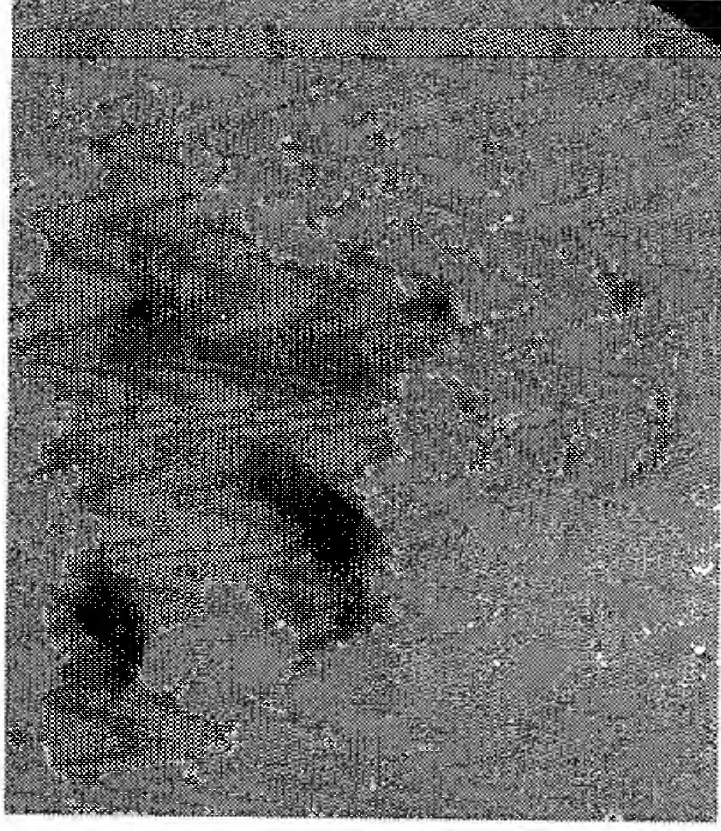
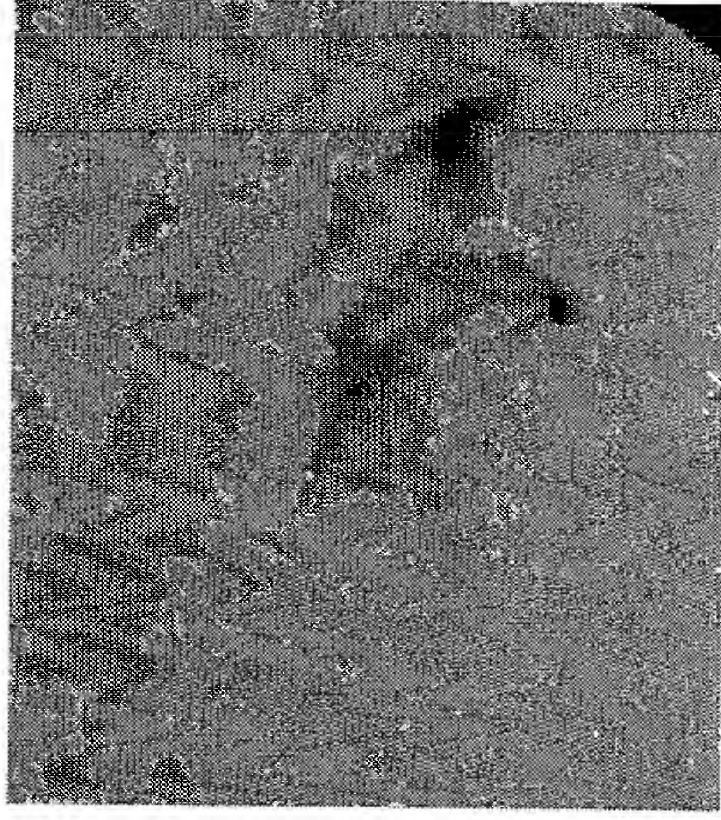


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Figure 6

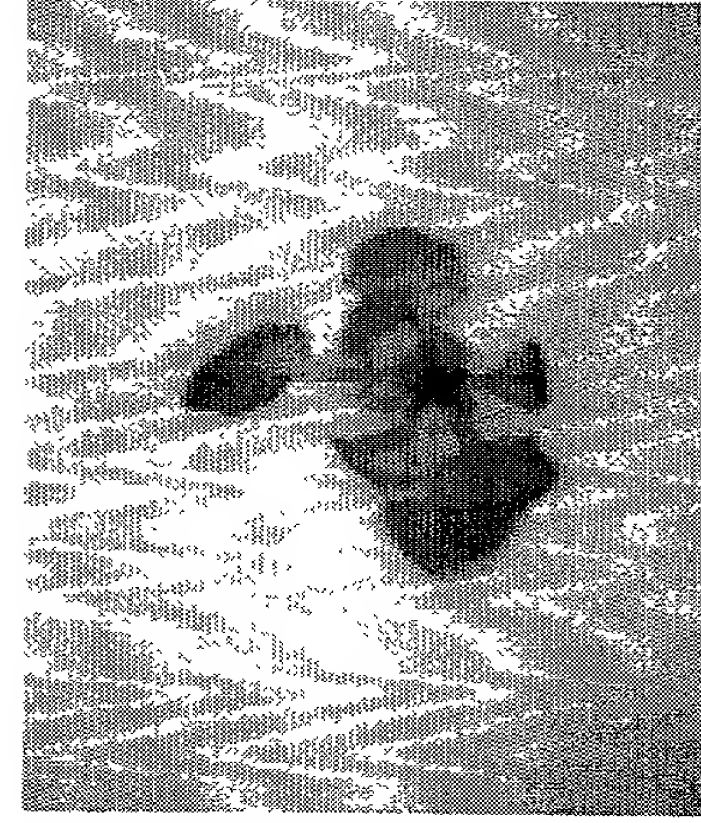


PpPP2A-3

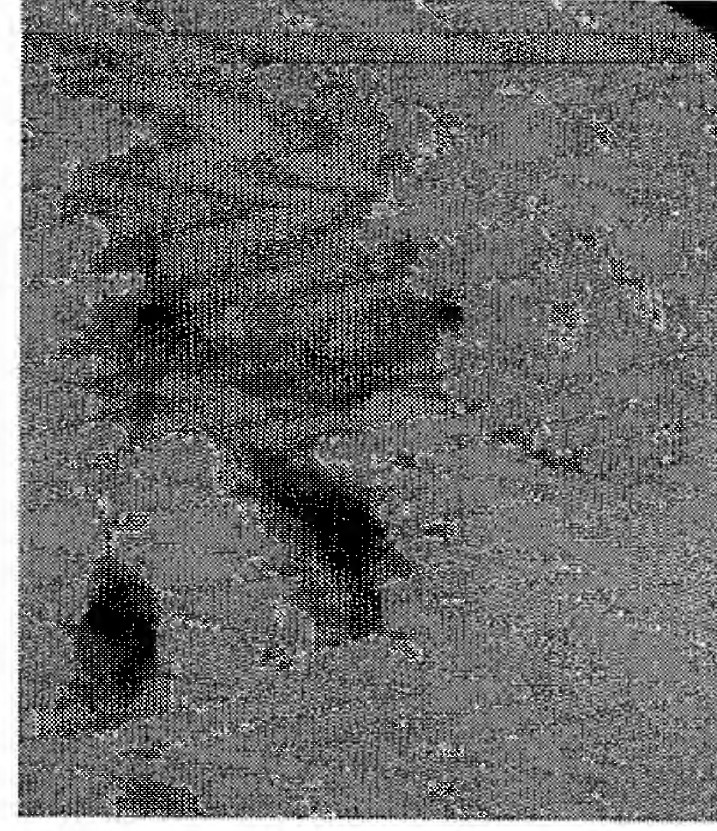
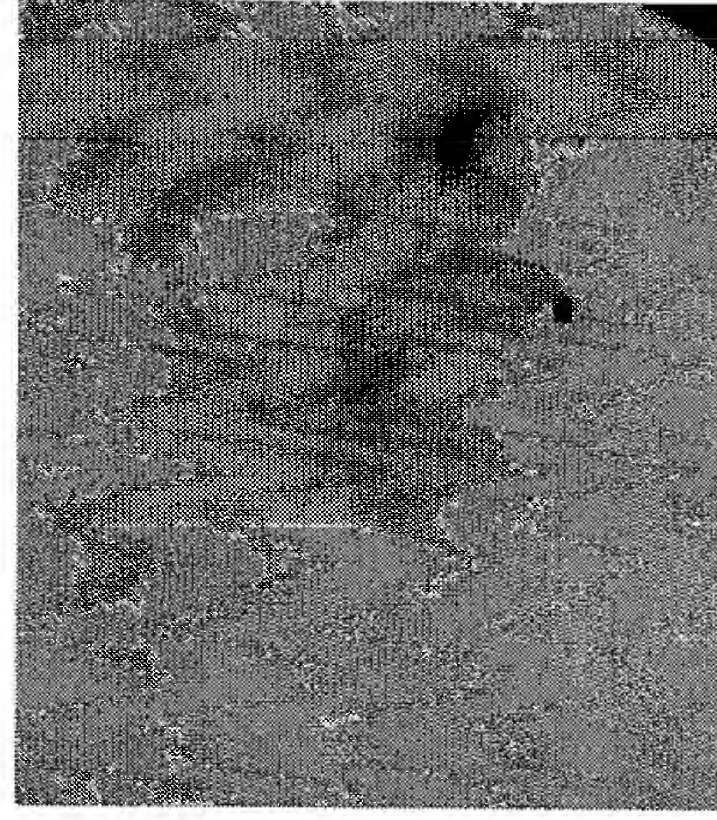


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Figure 7

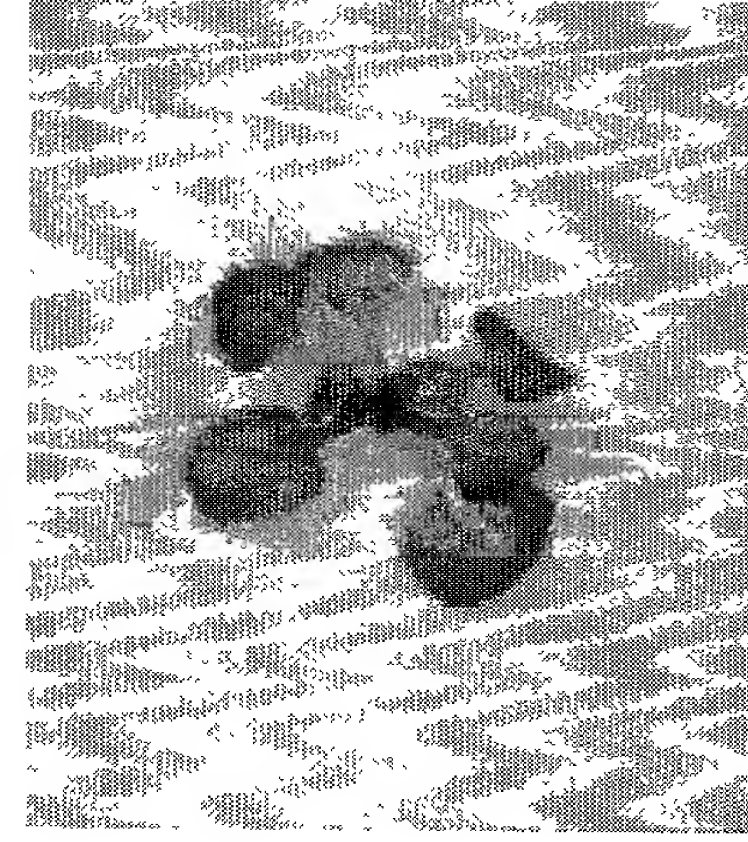
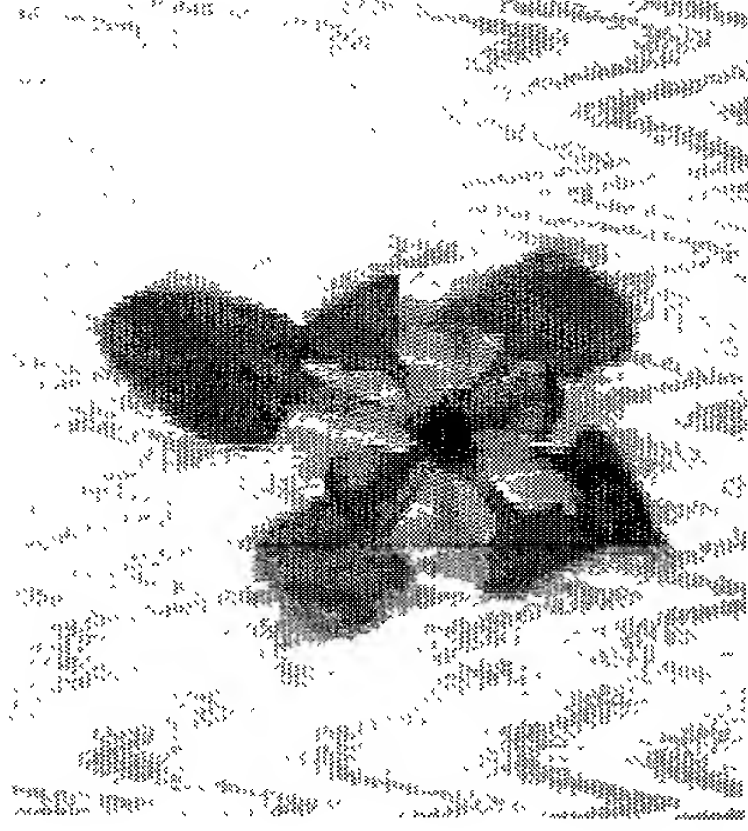


PpPP2A-4

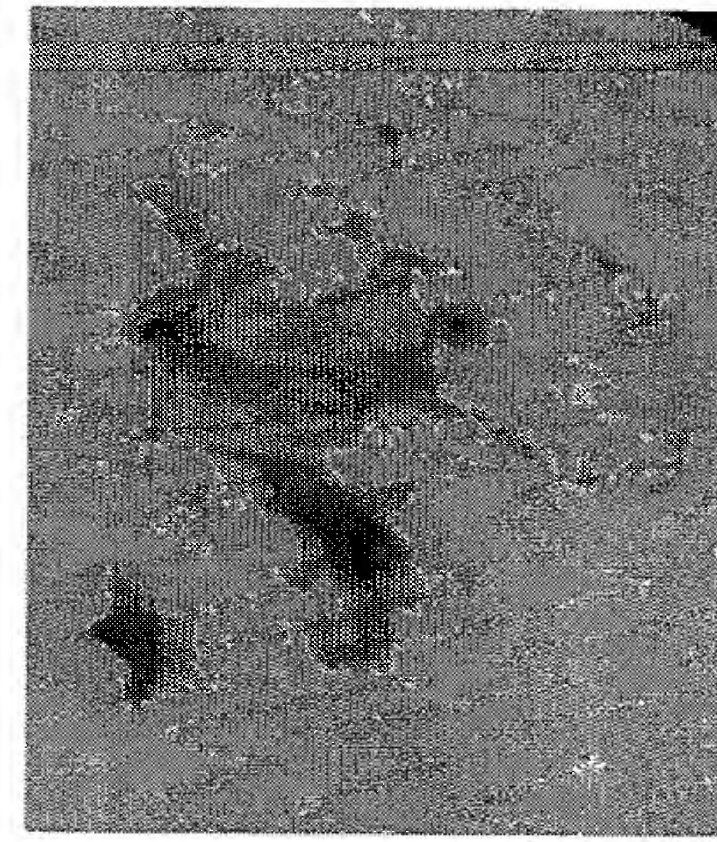
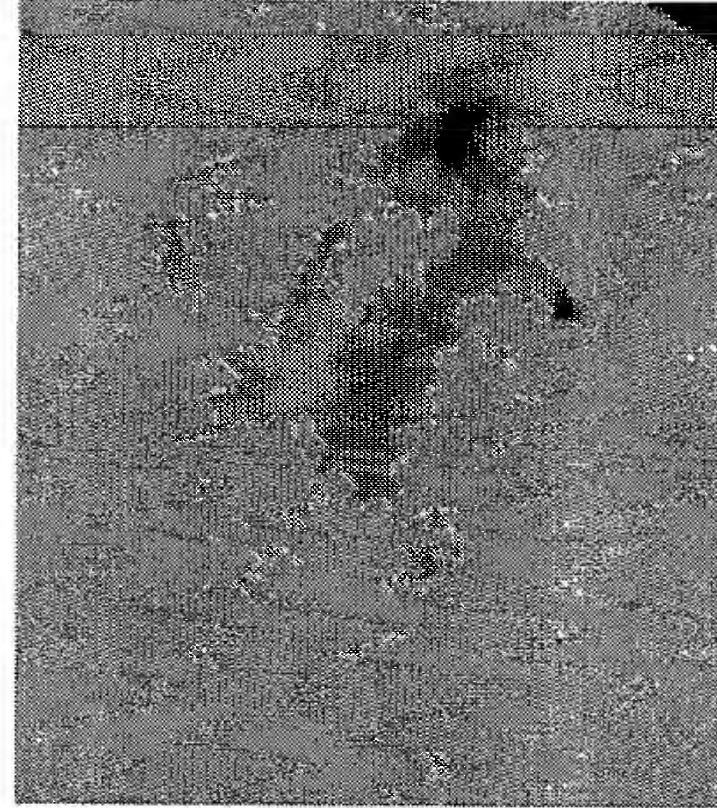
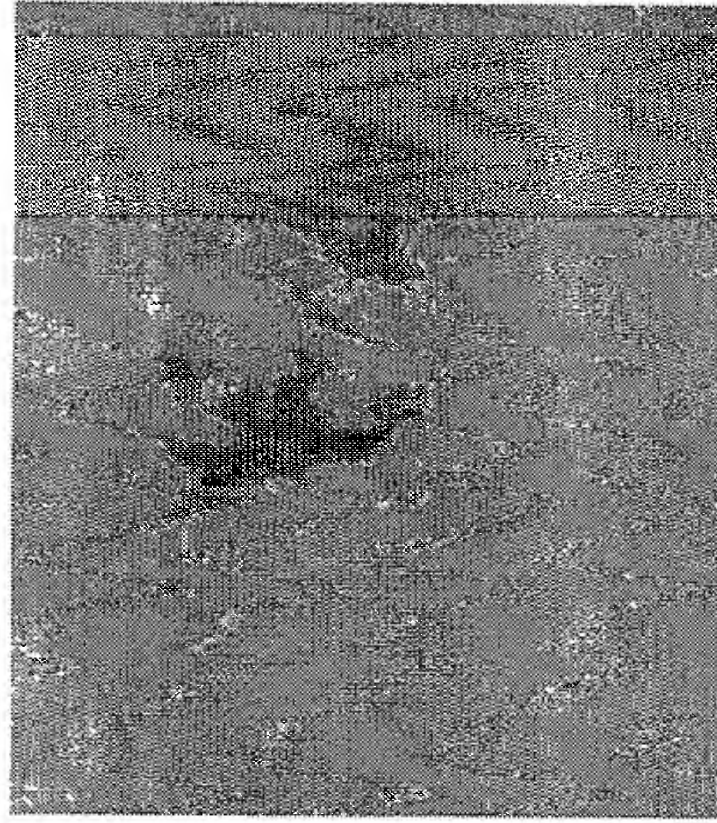


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Figure 8

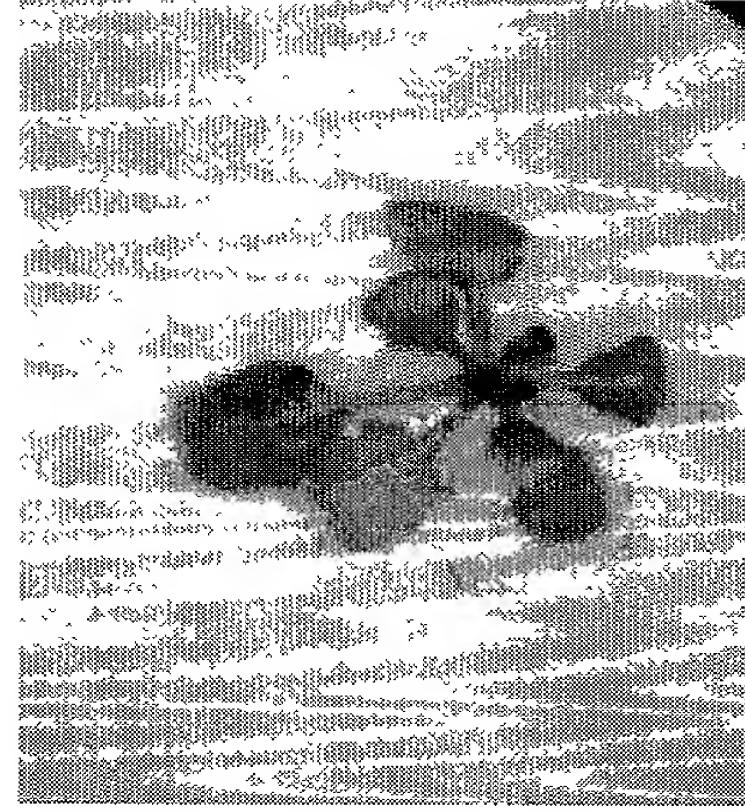
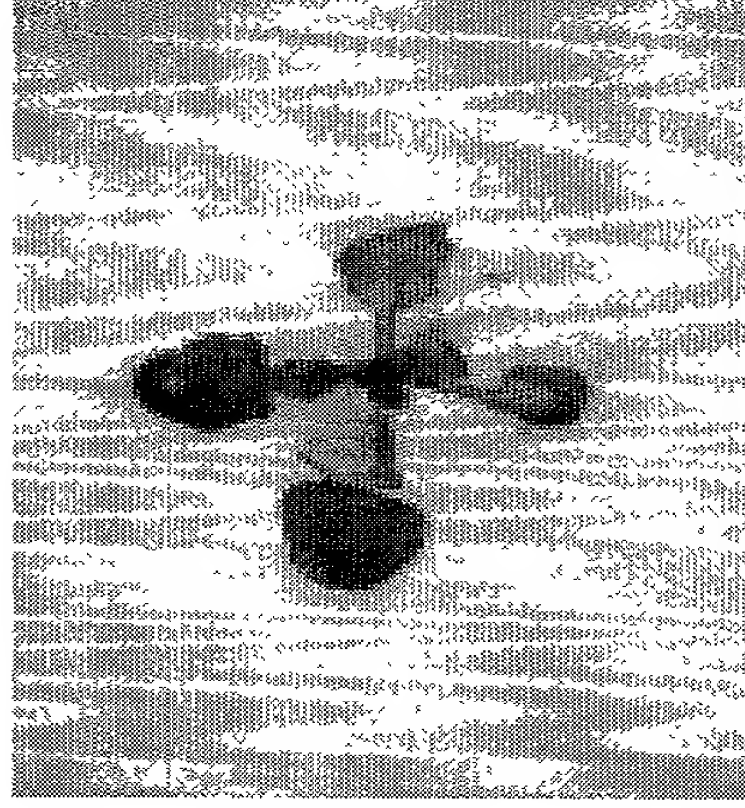
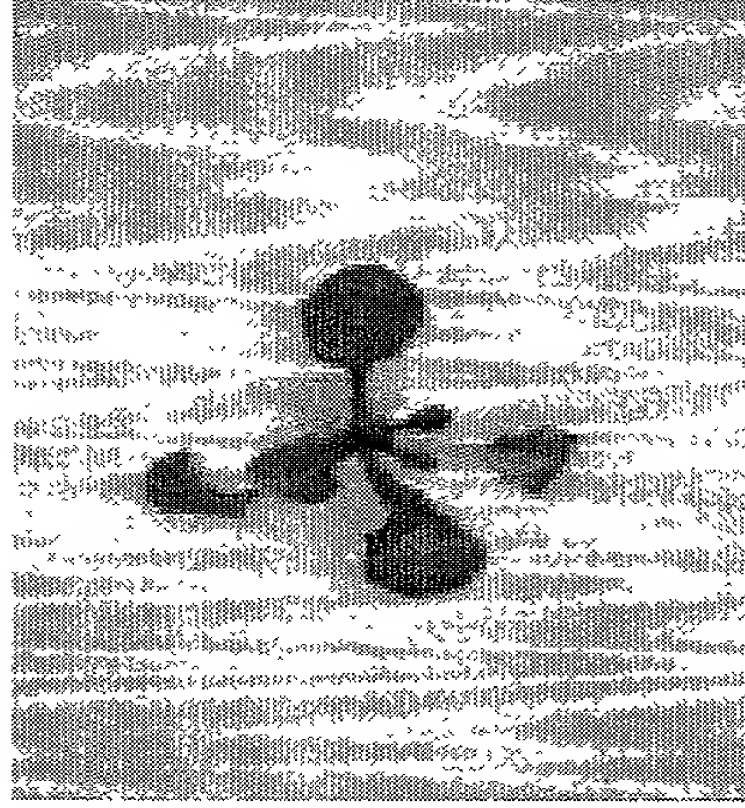


PpPP2C-1

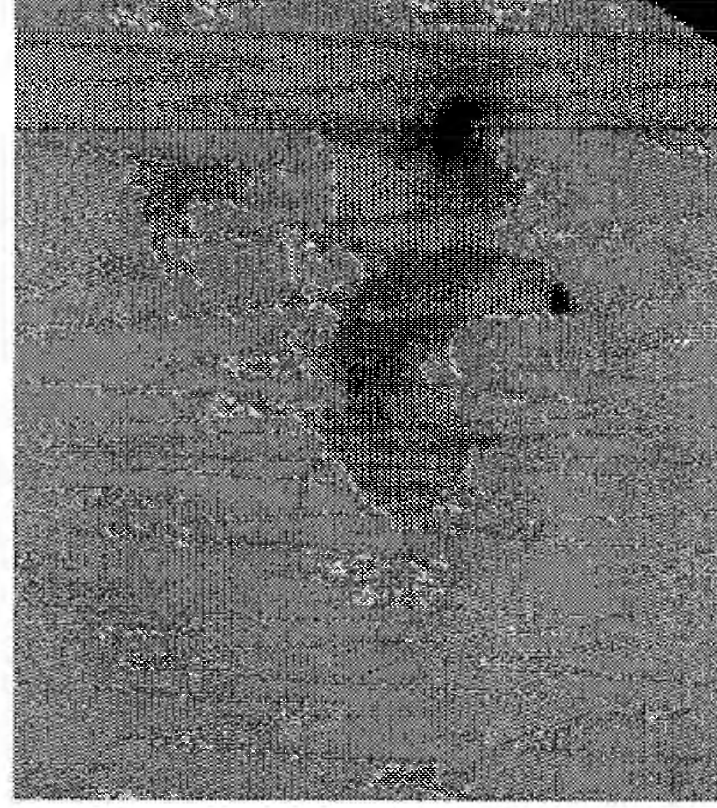
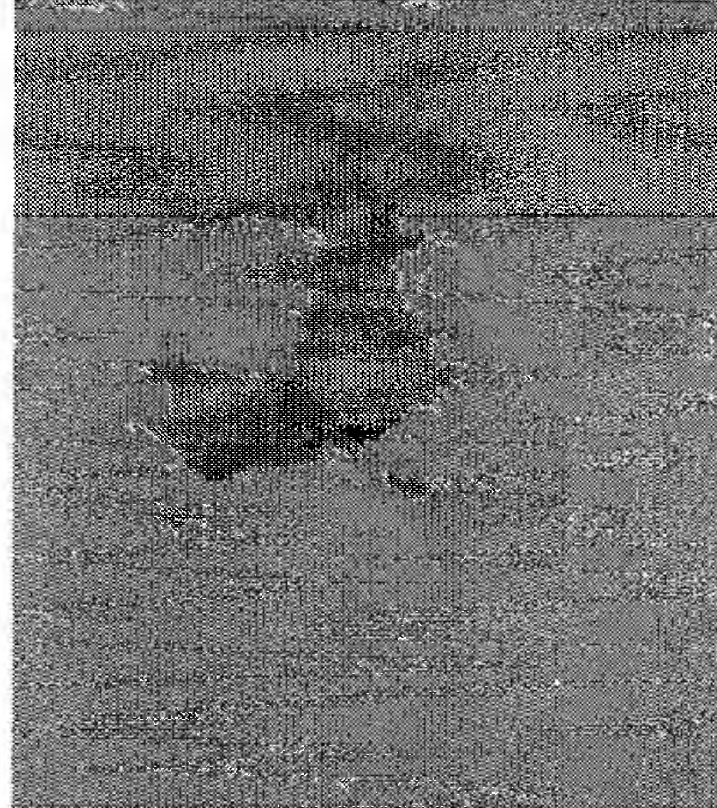


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Figure 9



PpPP2C-2

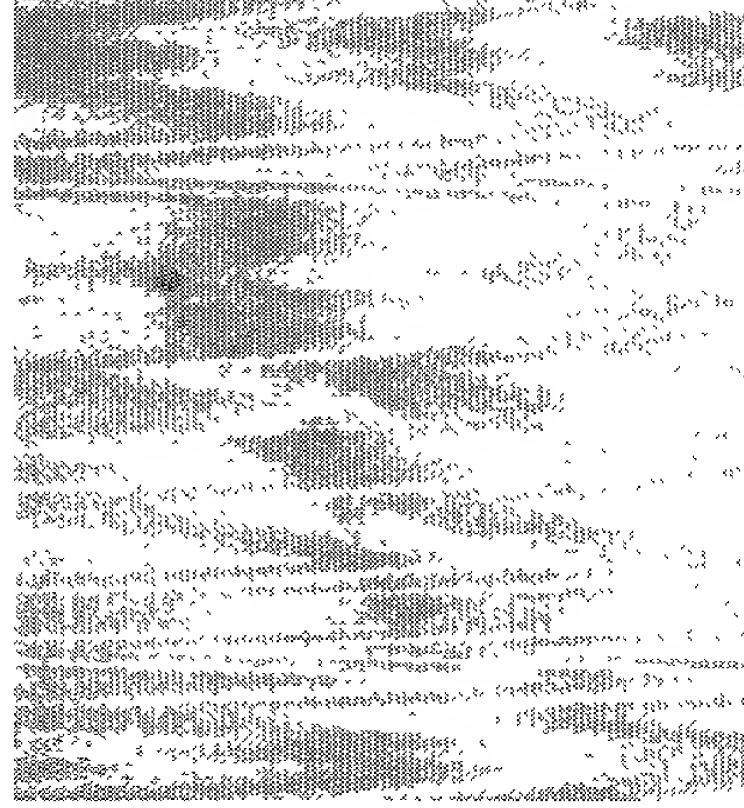
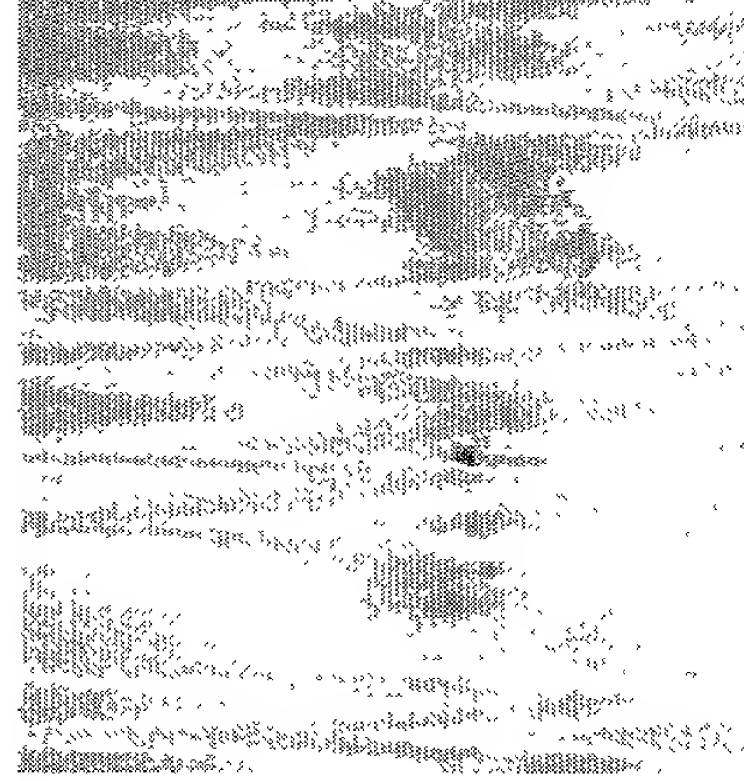


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Figure 10

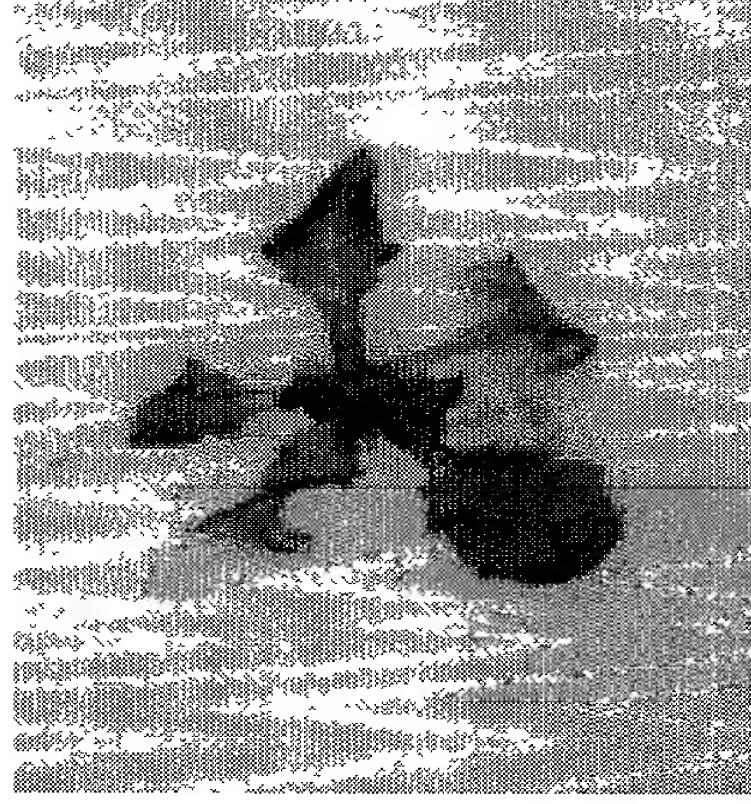
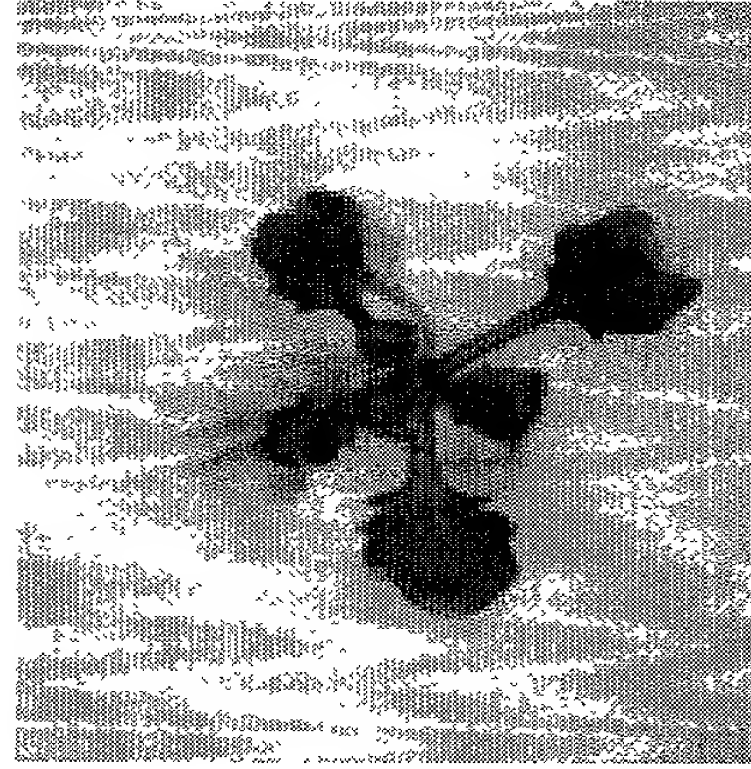
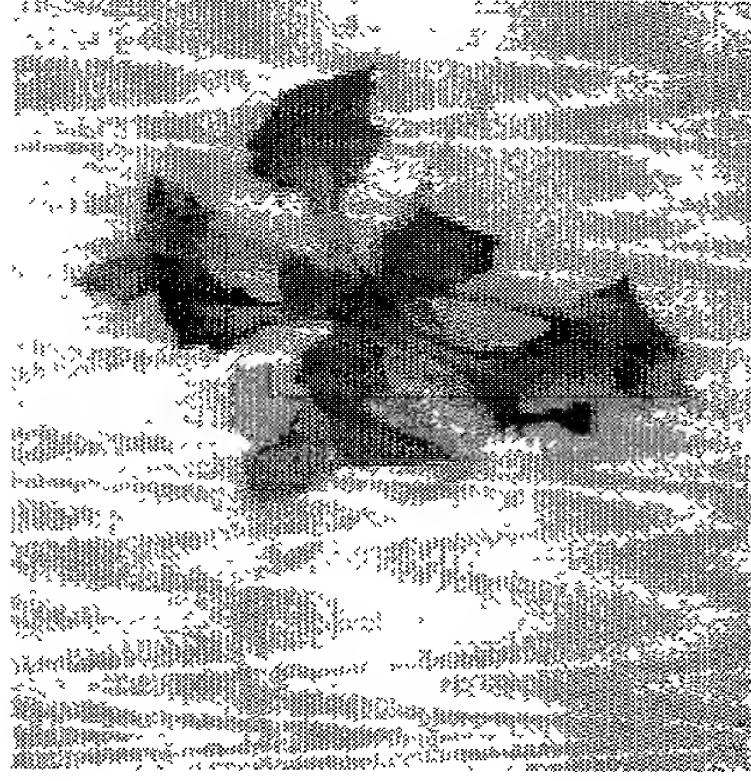


PpPP2A-2

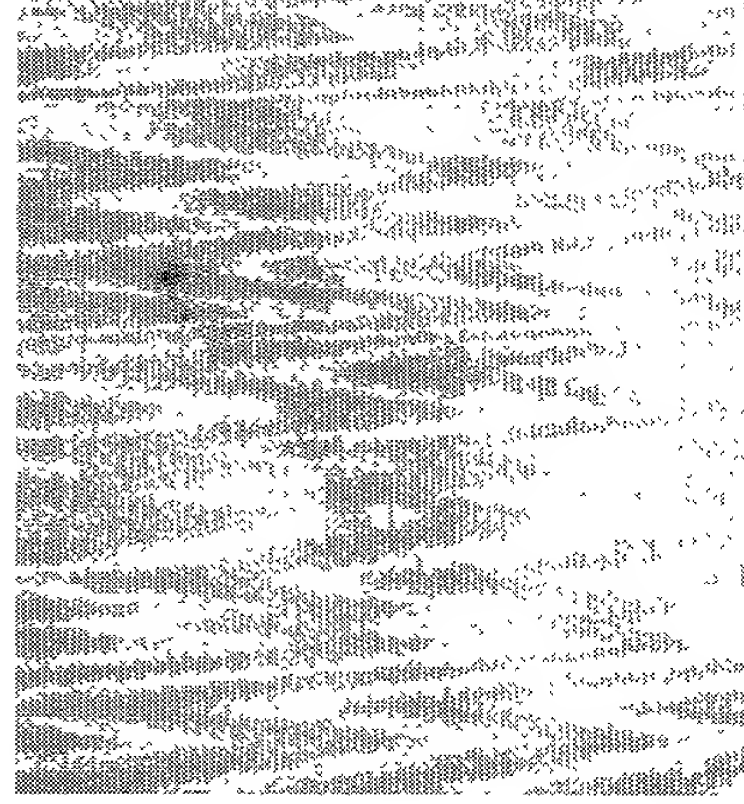
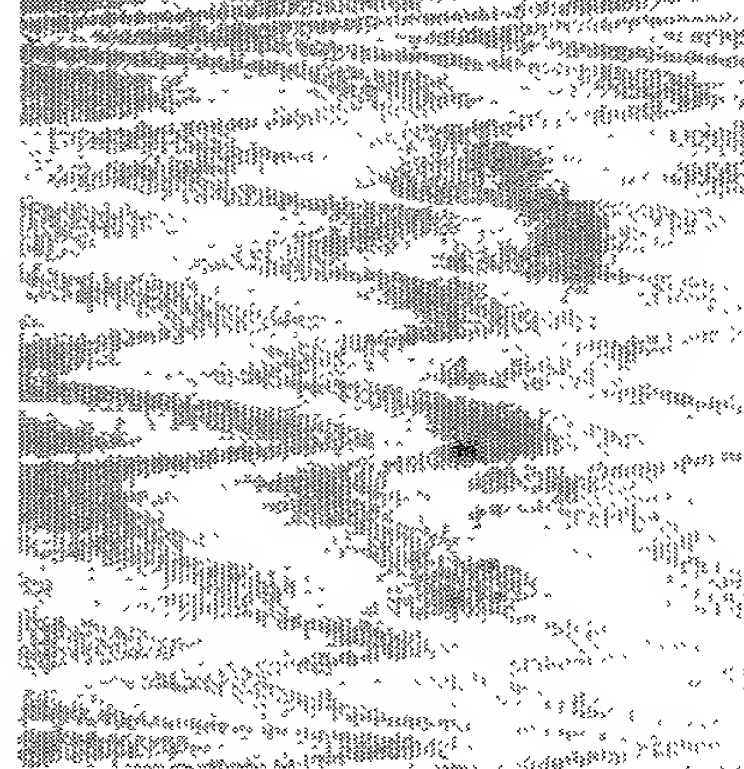
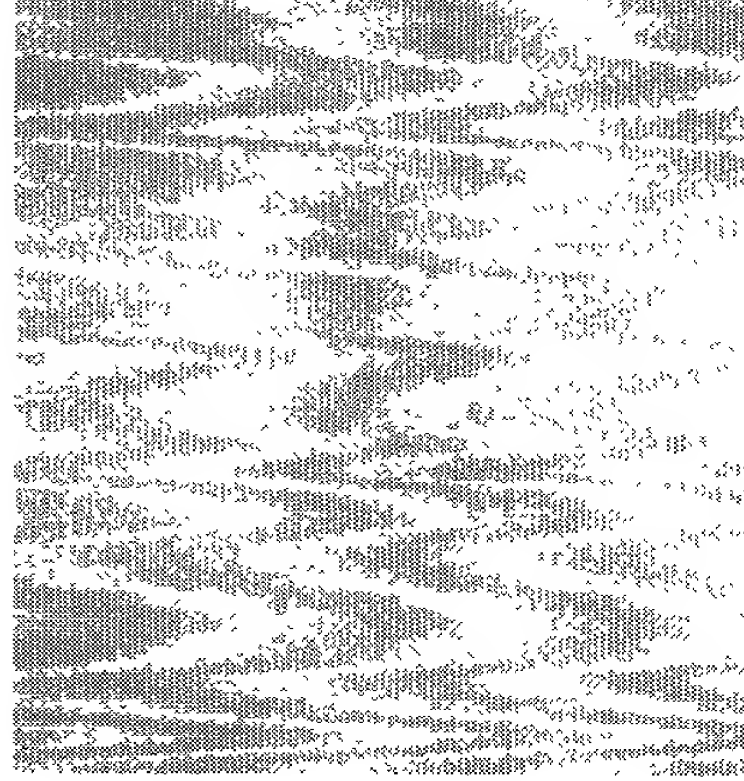


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Figure 11

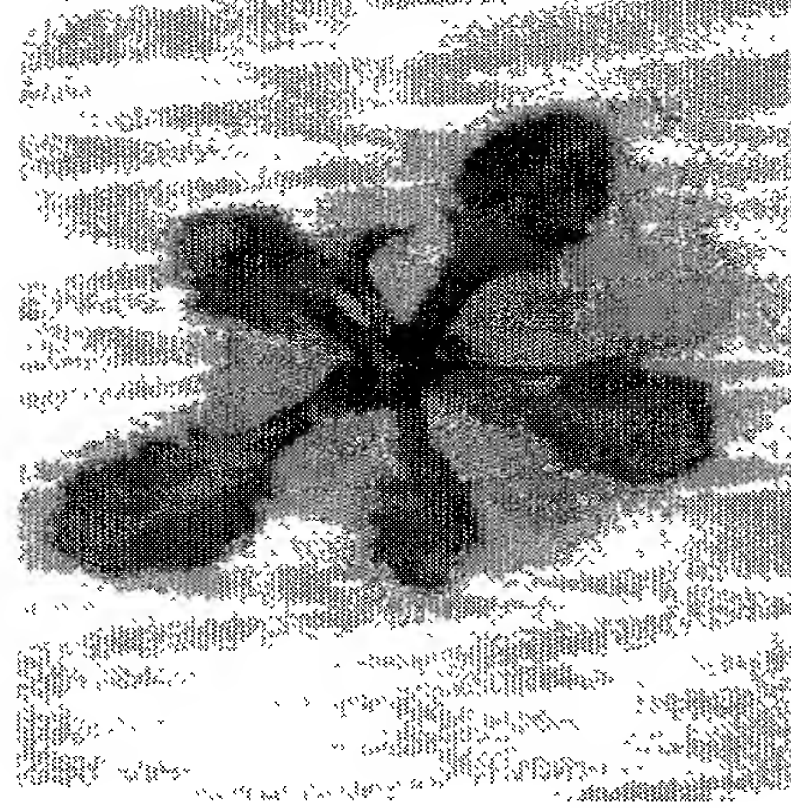
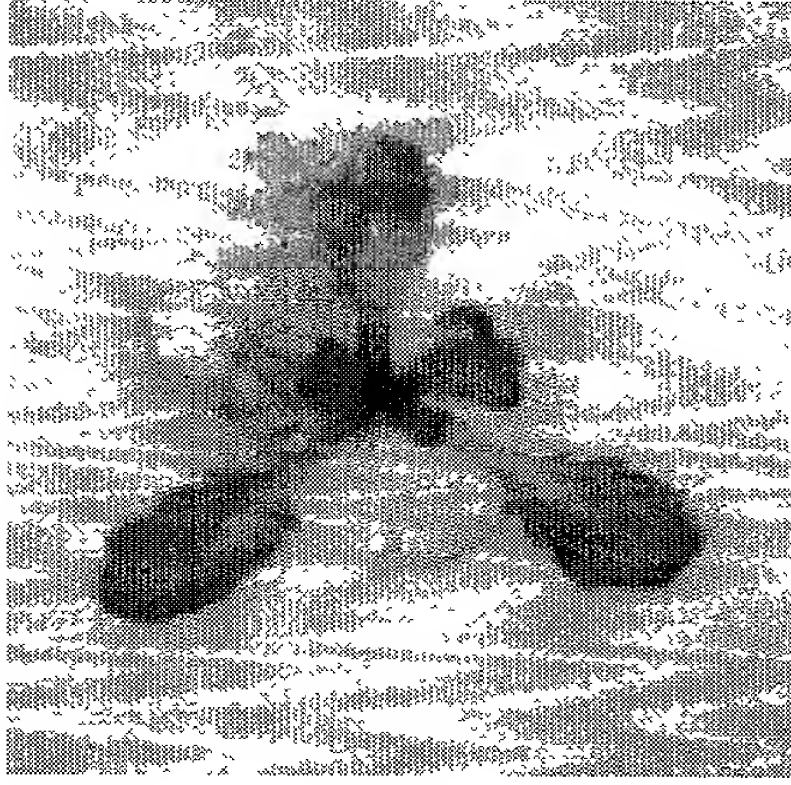


PpPP2A-4

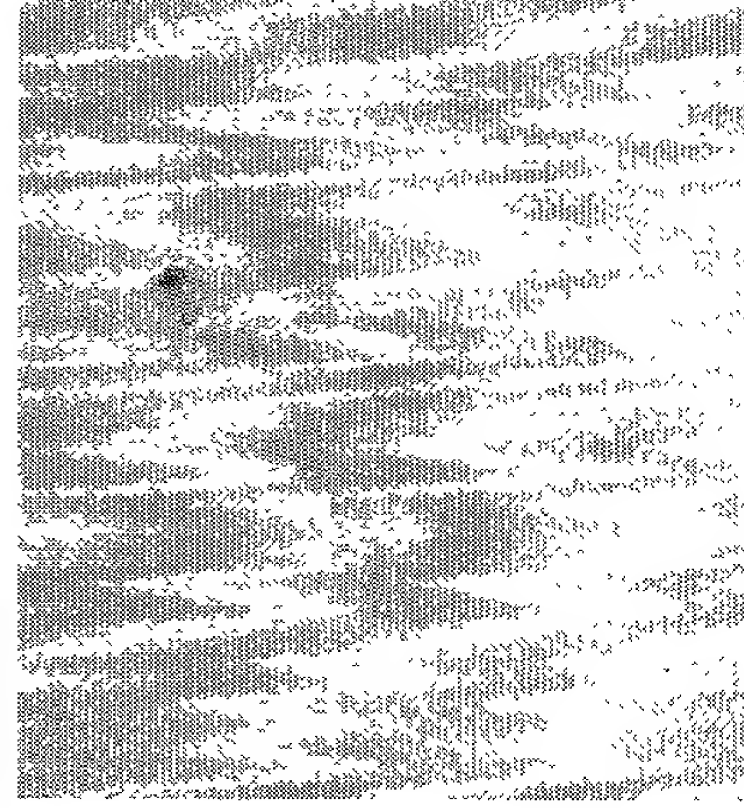
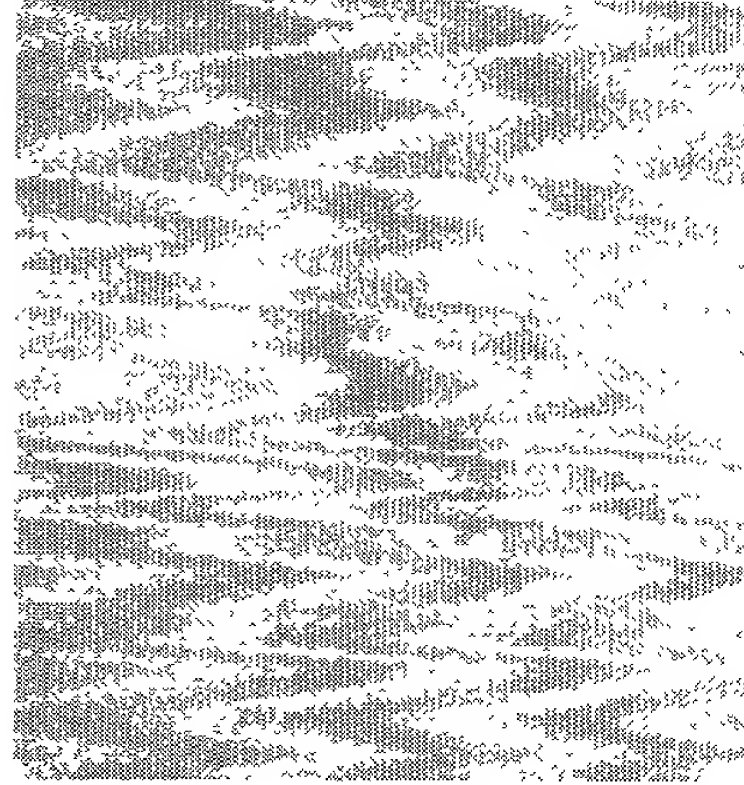


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Figure 12

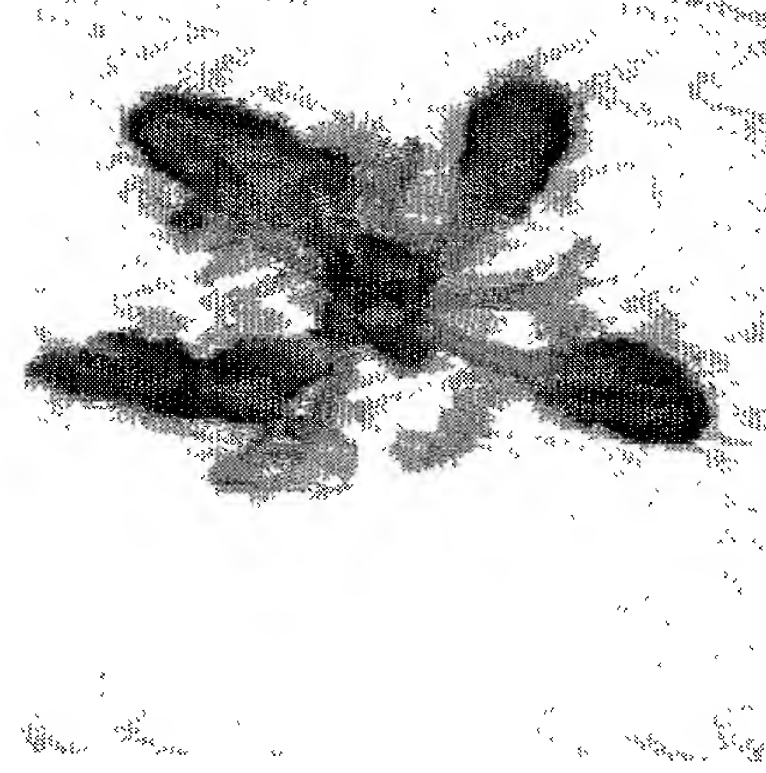
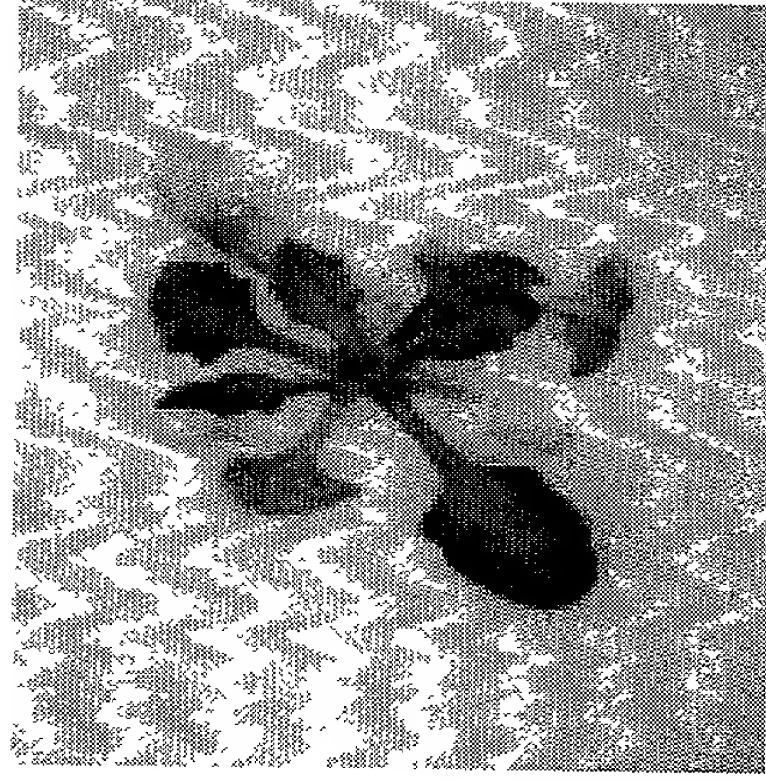


PpPP2C-1

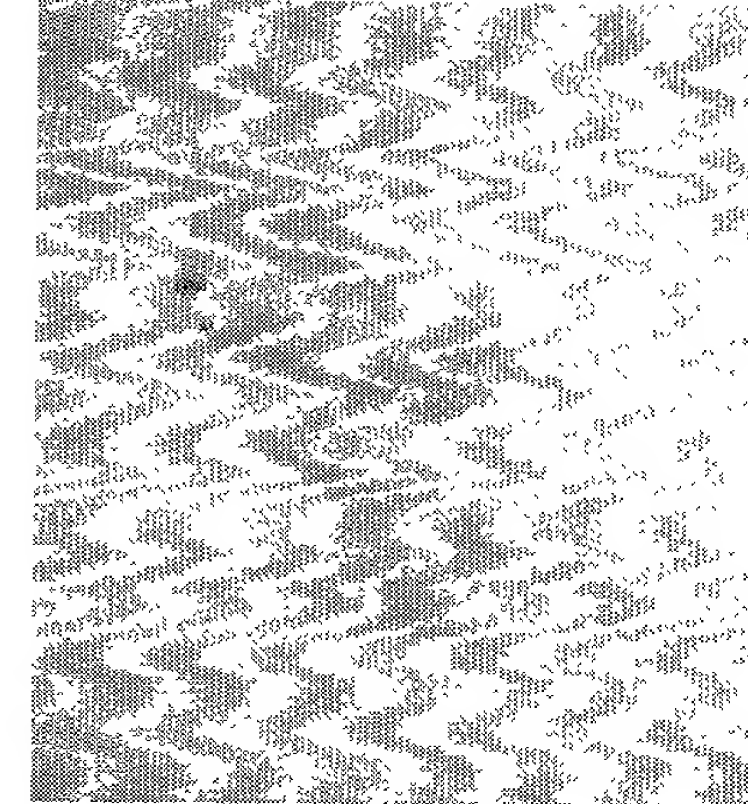
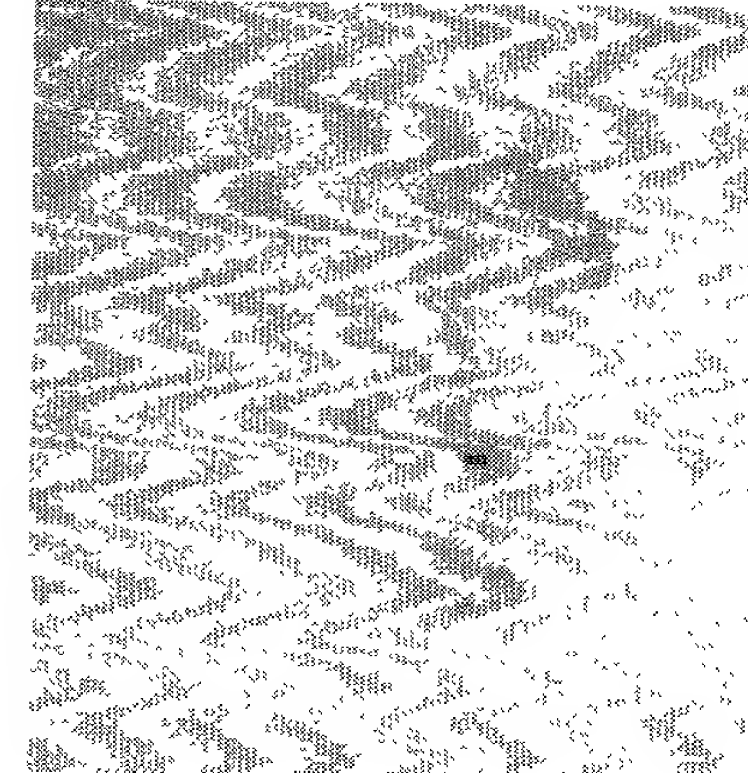
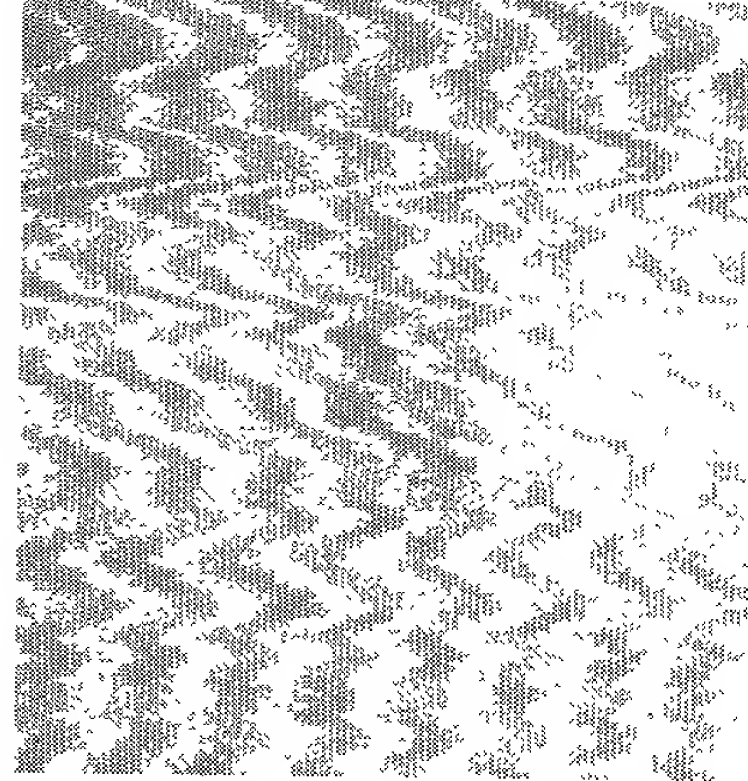


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Figure 13



PpPP2C-2



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